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ECONOMIC AND INDUSTRIAL AFFAIRS No. 2193

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EAST EUROPE REPORT ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2193

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COORDINATION OF CEMA COUNTRIES' ECONOMIC PLANS EXAMINED

Budapest PARTELET in Hungarian No 9, Sep 81 pp 9-14

[Article by Bela Szikszay deputy department head of the Central Committee: "The Main Experiences Derived from International Coordination of the National Economic Plans"]

[Text] The national economy's Sixth 5-Year Plan was made law last December by the National Assembly. By this the medium-range planning work has actually ended, and at the same time the possibility exists to review some of the experience gained in this activity—at this time, in relationship with the plan coordination with the socialist countries.

Plan coordination with the socialist countries is an organic part of the planning work. Its function is to mutually contribute to establishing international foundations for the national economic plans. Thus, for the socialist countries—which accomplish a decisive share of international economic cooperation among themselves—international coordination of the plans is one of the basic tools for creating the financial foundations for their plans, and for establishing the reliability of trade relationships.

During the course of plan coordination the CEMA member countries coordinate the main directions of their economic and technological-scientific cooperation, determine the mutual merchandise shipments which represent the foundations of the 5-year trade agreements, extend and expand the bilateral and multilateral agreements among themselves, and make new ones for 5 years, or in some cases for longer periods of time.

The planning organs have essentially completed coordination of the present 5-year plan, even though several countries, including ourselves, have not yet been able to coordinate our plans with the People's Republic of Poland. The joint work's result is that the agreements, contracts, etc. which insure the basic international conditions for the growth of the socialist national economies, have come into existence for the years 1981-1985 also, just like for the years in the past. But we must immediately add to this that on this occasion the work of coordination, which is not an easy job at any time, took place under even more difficult economic circumstances, and we did not succeed in finding the optimum solution for every problem.

When coordinating the national economic plans, attention had to be paid to world economic changes which have already taken place and which continuously exert their effects, and to the very important circumstance that most CEMA countries entered the intensive stage of economic growth at approximately the same time, and naturally shape their economic policies in accordance with this.

The changed external and internal conditions greatly influenced the behavior of the countries in the plan coordination, and determined their efforts in cooperation.

During the course of plan coordination we tried to take advantage as fully as possible, of the opportunities contained in the international distribution of work, and first of all in the socialist international cooperation, in order to contribute by this to solving our domestic and foreign [economic] balance problems, and to insuring our economic and social progress. For this purpose we endeavored to broaden our production and foreign trade relationships with the CEMA countries, primarily with the Soviet Union. We attempted to insure as high a proportion as possible, of our energy, raw material and base material requirements, as well as our needs for modern machinery and equipment, from socialist relationships. By improving our economic relationships we endeavored to achieve the acceleration of the needed changes in our production and export structures, significantly expand our spare parts and subassembly cooperation projects, also contributing by these to the advantageous growth of the national economies of the fraternal socialist countries and to the modernization of their production structures. And finally, our intention was to cover with additional export so high a ratio of our price losses deriving from the expected further deterioration of the exchange rates which would still make it possible to fulfill our fundamental domestic economic policy goals, and with which we could still create an equilibrium in our capitalist foreign trade relationships.

Our efforts as tendencies were realized. But our increased needs for some products (for example, energy sources, raw and base materials) could not be fully satisfied even under the more severe economic conditions than before. The extent of implementing our desires and intentions was determined by the objective conditions.

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As a result of plan coordination we can project for the time period of the Sixth 5-Year Plan a merchandise trade valued on unchanged prices at approximately 32 billion rubles, which is about 21 percent more than we actually traded between 1976 and 1980. Within this coordinated trade export continues to grow far in excess of import (during the Fifth 5-Year Plan our export increased 14 percent more than our import): between 1981 and 1985 our export will increase by 32 percent, while our import by only 12-13 percent. The result of this will be that during the 10 years between 1975 and 1985 the volume of our export will have increased by 70-72 percent, while our import by just over 30 percent. Export's growth is 2.4 times that of import's.

The differing growth rates of our export and import are caused partly by the limited nature of our import opportunities, and partly by the necessity of counter-balancing our increasing pricing losses.

The planned growth of the ruble-accounted merchandise trade-primarily the moderately increasing imports--is one of the factors for being able to project only a
relatively low growth rate in the national economic plan for the coming years.
Even this growth can become reality only if efficiency and profitability will
meritoriously improve in accordance with the requirements specified in the plan,
and if the ratio of the ruble-accounted import will decrease in consumption as well
as in accumulation. At the same time we must increase our export performance: unit
amount of growth of the national income is accompanied by more than a two percent
growth in ruble-accounted export.

The planned merchandise trade of the individual merchandise groups, and of import and export show the following picture:

--Our ruble-accounted energy imports from the CEMA countries will increase by 6-8 percent in 5 years. Compared to the previous time period this represents a large rate reduction. We were able to significantly expand only our electrical energy imports, the foundations for which were created by our cooperation in building the Hmelnyick nuclear power plant and the 750 kilovolt long distance power line. Our petroleum and natural gas imports are assured at the 1980 level, and our fission material needs will also be met. The most critical area of our energy imports is the import of coke: we can expect less import than before, and even this decreased quantity will have to be paid for by export of much harsher structure. Due to the decrease of coke import we are forced to import significant quantities from capitalist sources. Taking all these into consideration, the coordinated ruble-accounted energy imports and the domestic production will cover the national economy's energy needs under conditions of moderate economic growth—assuming that the planned energy rationalization will be fully implemented.

--The overall growth of our raw and base material imports will be very moderate. For most imported materials (chemicals, industrial lumber, manuade fibers, cotton) we were only able to insure last year's delivery levels, but not even that for some important materials (primarily nonferrous metals, ferrous metallurgical products, sawed pine lumber). We were able to achieve increased imports mostly of those products of which we participate in increasing the production, or for which we pay for the increase in a separate construction by supplying specified products. At the same time we are increasing our export of materials much more dynamically (to the other socialist countries, with the exception of the Soviet Union) than our imports from them.

All this makes maximum frugality with energy and materials used in production a task which cannot be postponed. It is a well-known fact that we use much more energy and materials per unit value of product than they do in the more developed countries. This indicates a laxity in utilization standards, one of the weaknesses of the technology applied and of the product structure which has developed. Great efforts must be made to implement as soon as possible an improvement of the material and energy consumption indices. Beyond this, we must make the decrease of material and energy consumption one of the continuously implemented goals of technical and technological progress, and of improving the product structure.

A moderate growth of material-type imports will make the situation of our national economy significantly more difficult even if we achieve the planned improvement in specific material consumption. For a significant portion of the materials, acquiring the necessary additional quantities or the missed deliveries will shift over into the nonruble-accounted relationships, and this causes significant expenditures of convertible currencies.

-The coordinated import of machinery and equipment will increase by 15 percent in 5 years, that is, somewhat more than the total import. We will continue to be able to obtain from our CEMA partners those large volume machine industrial products (trucks, railroad freight cars, tractors, etc.) which we do not wish to set up to produce, or the production of which we will eliminate. The fulfillment of our productive spare parts needs can be based on socialist import with greater reliability than before, even though the ratio of subassemblies in machinery imports and in meeting the domestic needs continues to be low. Even with this the ratio of machinery import from socialist relationships has decreased in the investments, which indicates that we did not succeed in relieving the burdens of nonruble-accounted machinery imports as much as we would have desired, or replacing some of the domestic capacities with machinery import from the CEMA countries and to change them over to produce other products.

Our machine industrial export will expand dynamically, by about 43 percent in 5 years (by more than 60 percent to the Soviet Union). The main product groups of our machinery export continue to be the public highway vehicles and their component subassembly units, communication technology items, electronics, light and food industrial machinery and equipment, computer technology products, instruments and machine tools.

The upswing in the trade of industrial consumer goods experienced in the last 5-year period has suddenly slowed down. The import expansion opportunities of light industrial and electrical household goods have declined, and the conditions of passenger automobile import have become more difficult.

In industrial consumer goods our export's most dynamically growing item is pharmaceuticals: in 5 years we sold 1.3 billion rubles' worth on the markets of our CEMA partners, 1 billion of this in the Soviet Union. For the next time period we accepted an obligation of 10-12 percent increase of the light industrial export.

Our food imports are expanding faster than the average due mainly to sugar and alcohol imports from Cuba, but even so the total import represents a negligible percentage. The plan coordination assures a reliable socialist export of a large proportion of our vegetable and fruit merchandise bases, as well as of our other large volume products which require transportation (grain, livestock, meat), a significant portion of them under advantageous conditions.

In summary it can be concluded that the plan coordination insures a large portion of our needs for the most important materials, energy sources and some investment goods—even if under conditions becoming more difficult, but in most cases still under more advantageous conditions than exist on the capitalist world market—, and by this it creates a solid financial basis for our more moderate rate economic

growth. Fundamentally objective reasons, given conditions and historically developed circumstances played roles in our material and energy imports not increasing at the desirable rate.

The structure of coordinated merchandise trade does not essentially change. In imports the share of some branches of material character (mining, metallurgy) will decrease, while others (for example, the chemical industry) will increase. The ratio of machinery import will remain essentially unchanged. In our exports the share of the machinery and chemical industries will increase, but light industry and foods will decrease. The direction of the changes basically agrees with our structural goals.

Within the trade of goods we did not succeed in significantly improving the production structure. The import of modern machinery, equipment, spare parts, quality materials, and consumer items to improve selection will not increase, or will increase only at a rate less than average. Export's merchandise structure improved somewhat in harmony with our goals. In the area of machinery and light industrial products and of foodstuffs we succeeded in slightly decreasing the ratio of profitably not exportable products.

The structure of trade is developing more favorably in the Hungarian-Soviet relationship than with the other CDMA countries.

. . .

The experience gained in plan coordination shows that the planned trade of goods, and primarily the moderately increasing imports—under strict domestic utilization conditions—is approximately in harmony with the relatively low economic growth projections of the national economy's Sixth 5-Year Plan. It insures the most necessary materials and products obtainable from the socialist relationship, and also results in the dynamic growth of our export. However, along with these main correlations the plan coordination also produced some experience and called attention to such characteristics in the cooperation, with which we will have to deal as durable phenomena in the future also, and in improving cooperation. Especially the following ones deserve attention among these.

- * The growth rate of mutual trade of goods will further decrease in the coming years. (Our ruble-accounted trade of goods—calculated at 1968 comparison prices—increased by 68 percent between 1971-1975, by 38 percent between 1976-1980, and in the next 5 years—at 1980 prices—will increase by 21 percent.) The closer production and development cooperation projects will develop at a slow rate. Under the changed conditions it is becoming more and more difficult to insure the mutual interests the old way—primarily in the area of rew materials.
- * The problem of exchange rate losses is closely connected to this; which presents itself primarily in the Hungarian-Soviet relationship due to the composition of the merchandise trade. Since 1975 the Hungarian national economy suffered pricing losses of about 18 percent in the socialist relationship. This price loss appeared stretched out in terms of time, relatively smoothly, making it easier for us to adjust to the new situation, but its effect in terms of the sum approximates the price losses we suffered by the capitalist world economy.

We have reacted several ways to counterbalance the price losses: improved the structure of our export, raised our prices where it was possible to do so on the basis of the CDMA pricing theory, applied for (and received) credit for a part of the price losses, and mainly increased our export volume (significantly faster than the growth in import's volume).

Due to CEMA's price formation conforming to the world market price tendencies, we will also have significant price losses in the 1981-1985 time period. The demand of our socialist partners to keep the trade of goods in equilibrium at current prices, has vigorously increased (which means that we are receiving new loans in essence in the form of delaying the repayment of the old ones). Since the possibilities of raising our product prices are limited, additional export becomes the main tool for creating balanced trade at current prices. This is present in the fact that in the next 5 years the growth of our exports will by 20 percentage points exceed the increase in import's volume (even more to the Soviet Union). The Hungarian national economy can still accomplish this through very great efforts, in such a way that in the meanwhile we will also reestablish the equilibrium of our capitalist trade, and we will also preserve the standard of living already achieved.

* The economic condition of most CDM countries (the extent of indebtedness to capitalist countries, equilibrium problems, reduced economic growth rate, etc.) has brought new characteristics to the surface which are not favorable from the viewpoint of expanding cooperation, or reinforced these characteristics. The CDM countries, for understandable reasons, endeavored to make their structural advantages prevail as much as possible, even against each other. This is expressed in making the conditions of energy and raw material shipments continuously more and more severe, and in requiring shipments not in harmony with the given natural conditions of the individual countries (material for material, energy for energy).

The role of contract shipments increased, and the structural restrictions further intensified. All these indicate that the coordination of plans—due to the economic difficulties of some countries—have been influenced to quite a large extent by temporary, short-range interests and goals. This was also reflected in the fact that hardly any new, long-range agreements were made recently which would meritoriously increase and broaden economic cooperation, and indeed in some cases extending the earlier agreements also ran into difficulties.

During the course of plan coordination certain shortcomings of the cooperative mechanism of the CEMA countries also became visible. The mechanism of cooperation is developing unevenly: efforts have been made to improve production cooperation, but only some elements of the economic system of tools (for example: prices, interest) progressed, and even those to some extent in a manner separated from the system as a whole. The overly centralised decisionmaking and coordinating mechanism is too rigid and time consuming. Direct cooperation between the enterprises did not improve sufficiently. It is a contradiction that while some economic conditions (for example, the prices) of our relationships are approaching the capitalist market's conditions, the CEMA economic community in essense has no effective, multi-lateral accounting and credit system. Due to all these things the implementation of mutual long-range interests, and coordination of the national interests is running into significant difficulties.

The situation has ripened to the point where our economic cooperation should be reviewed separately and together by the CDMA countries, and the main directions of further development, and expansion of the relationships based on common interests should be defined. This is also a reason for us to happily great the proposal of SZKP's [Soviet Union's Communist Party] 26th congress, according to which—based on thoroughly prepared analyses and proposals—the highest level leaderships of the CDMA countries should, within the foreseeable future, discuss the directions, ways and means of further developing the economic cooperation. And even until the directions of further developing the multilateral economic relationships between the socialist countries, and of perfecting the CDMA's operating mechanism are developed, it is our fundamentally important interest to expand our economic relationships—first of all, the Hungarian-Soviet economic relationships—over and above what has been fixed in the plan coordinations and by the long-range agreements.

Expanding our economic relationships is one of the indispensible conditions of our economic development. This was declared by the Central Committee's October 1977, and also the April 1978 resolution, and this was also reinforced by the resolution of our party's 12th congress. However, we can only insure our national economy's equilibrium and modest growth rate—under the known foreign and domestic circumstances—if we solve the expansion of our relationships by joint efforts, with shipments which are mutually advantageous, and equally advantageous for the parties. The first requirement is to mutually and fully honor our agreements. Beyond this, we must find ways to expand our cooperation which are favorable over the short as well as over the long range. We are striving to obtain supplementary imports by the expansion which we need. Based on this supplementary source it will be possible to increase our exports above the plan, and to create a merchandise trade surplus and payment surplus which will help solve our equilibrium problems with extra shipments of the necessary composition, and will enable us to better and better approximate balanced trade even at the current prices.

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JOINT ROWNIAN-HUNGARIAN BAILROAD RESEARCH TO CONTINUE

Bucharest REVISTA TRANSPORTURILOR SI TELECOMUNICATIILOR in Romanian No 3, Jun 81 pp 123-124

[Article by Emil Spires, director of the ICPTT, and Dr Jossef Magy, director of VTKI]

[Text] Presented here are the positive results of cooperation between the ICPTT (Institute for Technological Research and Design for Transportation) of the Socialist Republic of Romania and the VIKI (Institute for Scientific Research of Railroads) of the People's Republic of Hungary in fulfilling the joint research tasks.

The rapid evolution of development of science, technology and technical progress in the modern world has made its mark on the railroad's development and has been called on to satisfy the requirements for transport of goods and passengers faster, under conditions of full safety of traffic and transport safety, with modern technical means and with new or improved technologies.

The priority development of railroad transport is based on the ability to take over the transport of mass products, which are continually increasing, with a substantially smaller consumption of energy compared with other transportation systems.

At the same time, general social-economic development has made it possible to increase material production, intensify commercial exchanges between states, increase the number of passengers, whether as tourists or in the interest of their jobs, elements with which the railroads must cope through prompt, fast, safe and comfortable service.

In order to satisfy these requirements, new technical and technological solutions, capable of allowing clear progress in this sector of activity, are required, solutions such as construction, modernization or fortification of the tracks, adoption of new traction systems, improvement of technological processes in the stations and so forth.

This progress, clear today, is the unterialisation of scientific research, of the efforts undertaken in the research and design institutes. As in other areas as well, the requirements for the international division of labor have required that research activity also be the subject of international cooperation, for the purpose of uniting the creative abilities in order to jointly achieve the best technical and technological solutions.

In this context, direct bilateral cooperation was initiated seven years ago, and it has developed along the way, between the Institute for Technological Research and Design

for Transportation (ICPTT) of the Socialist Republic of Romania and the Institute for Scientific Research of Railroads (VTKI) of the People's Republic of Hungary, as a result of the understanding on direct scientific-technical collaboration and cooperation between the Ministry of Transport and Telecommunications of the Socialist Republic of Romania and the Ministry of Communications and Post Offices of the People's Republic of Hungary in 1974.

In this understanding, the two institutions catablished the bases for research, which are the subject for bilateral technical collaboration, exchange of scientific-technical information, meetings between experts, the sending of publications and periodicals published by both institutes, seeking economic efficiency for the solutions adopted.

During the meetings of the representatives of the leaders of the VTKI and ICPTT research institutes annually, the activity carried out by the specialists for each subject is analyzed as well as the results obtained, method of application in rail-road operation, their tasks for the coming period and in the future plans.

Experience until now has proven that a productive cooperation has taken place between the two institutes, carried out in reducing the time it takes to finalize certain subjects, in finding an increased number of theoretical and practical solutions as well as in utilizing them in saving the capital meant for applying research subjects in production and in better utilization of the apparatuses supplied.

A short review of cooperation between the two institutes in the seven years of cooperation would be graphic to bring out the goals sought and, at the same time, would bring out the efforts made by the specialists to solve the joint subjects of research.

Joint research took place in preceding years on the problems of the stability of the track infrastructure, the lift of the track with regard to the superstructure and maintenance conditions as well as problems on the methods for economic planning of the railroad transport.

A large number of research projects were worked out within these goals and they have led to reducing the terms for finalization as initially forecast in the research plans of the two institutes.

Another example of the cooperation of the Romanian and Hungarian specialists has been in the area of utilizing the geotextile materials meant to lead to increasing the lift capacity of the railroad platform, with experiments being conducted on both railroad networks with mutually sent materials. The use of these materials is leading to the fortification and increase in lifting capacity of the track platform and they are economical and indicated for repairing muddy joints, for fortifying the embankments and for building drainage systems. Savings of around 10 million forints per year will be obtained at the MAV [expansion unknown] alone following completion of the projects to apply the geotextiles.

Within the mutual exchanges of experience, the VTKI has applied the ICPTT's experience in designing and manufacturing type T16 and T17 concrete crossties, in building the prestressed concrete crossties in the form of a double fan, which are able to support a lateral load and higher vehicular speeds and which provide greater track stability.

On the other hand, the ICPTT has used the VIKI's experience in a positive way in the results of experiments with bonded wooden ties and, following a visit to the VIKI

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laboratory which utilizes radioactive isotopes and the documents received, it accumulated important experience in the area of utilizing nuclear technologies in transport.

In the area of "optimization of the transport of goods through electronic computer technology and scientific methods of economic planning of railroad transport," a productive collaboration existed, with the VTKI in particular utilizing the conclusions on the overall problems of afficiency of combined railroad, motor and naval transport, while the ICPTT utilized optimization of the transport of goods aided by the electronic computer.

The general aspect resulting from the ICPTT and VTKI collaboration is the sustained effort of our institutes, so that the scientific potential is reflected in the modernization, development and increase in railroad efficiency in both countries and in increasing the contribution of scientific research to solving the basic problems confronting railroad transport.

In the 1981-1990 decade, when the future bases of techniques and technologies will be laid in the area of transportation, the two institutes will deepen and diversify their collaboration so that they become primary factors in the progress and efficiency of their own railroads.

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USSR-BULGARIAN AGREEMENT ON SERVICING PERRYBOATS PENDING

Moscow MORSKOY FLOT in Russian No 8, Aug 81 pp 47-49

[Article by V. Lvov'skiy of the Black Sea Central Planning and Design Bureau]: "Technical Servicing of Ferries"]

[Text] Regularly scheduled trips of railroad ferries have reduced by thousands of kilometers the journies of crews engaged in the international hauling of cargo between the People's Republic of Bulgaria and the USSR. Over this sea "bridge" every year seamen and railroad workers transport about 2 million tons of national economic cargoes, providing significant economic benefit and raising the effectiveness of railroad car utilization.

Two Bulgarian and two Soviet vessels comprise the "conveyor belt" between the ports of Il'ichevsk and Varna. Ferryboats leave their piers strictly in accordance with schedule. From there, all stages of their further travel are also strictly regulated. Today, a round-trip takes 60 hours. Plans call for the reduction of this time to 54 hours through improving the work of these ferry crossings.

The intensive operation of ferries and the large losses caused by the compulsory withdrawal of each ship from service for servicing condition the special significance which is attached to the rational organisation of ferryboat technical servicing (TO).

As applied to ferryboats, the technical servicing task consists of facilitating the uninterrupted work of vessels all during the inter-repair period of the operation-repair cycle (LATS) planned for them. The period between regularly-scheduled shippard (formerly minor) repair work or between completion of construction and first shippard repairs has been adopted for this operation-repair cycle.

During the 11th Five-Year Plan period, a four-year operation-repair cycle has been projected for Soviet Ferryboats. The structure of this operation-repair cycle is approximately as follows. During the first year of the cycle, the vessel is taken out of service for 12 days in all for the carrying out of inter-trip repairs. Withdrawals from service lasting 3-4 days are called for after the ferry has been in operation for 3 months. The length of withdrawal from service during the second year is 20 days, with 6 of those devoted to inter-trip repairs and 14 to dry-dock repairs called for at the end of the second year. The third year of the cycle repeats that of the first, except that there is an increase to 16 days in all in the length of time the vessel is taken out of service for inter-trip repairs.

During the fourth year, shippard repairs lasting 55 days are wound up, with several inter-trip repair periods of 8-10 days' duration also occurring during the course of the year.

The average yearly ship operation period over the four-year operation-repair cycle under this repair plan is 336 days.

A railroad ferryboat is a complex engineering structure. A considerable volume of technical servicing should therefore be carried out in order to facilitate the working order of all of its components and technical equipment during the period between the time each of the vessels is taken out of operation. For Soviet ferry-boats of the "Geroy Shipkin" type, which were built in Yugoslavia, the annual technical service work volume should be 62,774 man-hours, which includes 16,805 man-hours of work on the hull, 2,179 man-hours of work on fire-fighting equipment, 28,746 man-hours of work on shipboard mechanical equipment and engines, 13,364 man-hours of work on electrical equipment, 1,212 man-hours of work on radio and radio-navigation equipment, and 468 man-hours of work on electronavigation equipment. For Bulgarian ferryboats of the "Geroy Odessa" type, the annual volume of technical service work is approximately 60,000 man-hours.

An entire complex of documents on technical servicing list the ship designs and technical means which need servicing, the composition of the technical servicing to be performed on them, the man-hours to be spent on this work, the periodicity of its fulfillment, the possible executors of this work, as well as the nomenclature of the repair material and spare parts needed to do this technical servicing. The Black Sea Central Planning and Design Bureau works out these documents for Soviet ferries while the Bulgarian Institute of Water Transport develops them for the Bulgarian ferryboats.

Ministry of the Maritime Fleet documents provide that the technical servicing of ferryboats, as well as of other merchant fleet vessels, be performed on an uninterrupted basis and that it include both planned and preventive work. The principles of this planned-preventive system are sufficiently well known and do not require any explanation. The uninterrupted nature of service plans facilitates the carrying out of the technical servicing of these vessels both during the period of their navigation and production stopovers as well as during the time they have been taken out of service for repairs.

Ship's crews carry out a significant portion of this ferryboat technical servicing. With a ferryboat crew (including the loading-unloading brigade) of 55 and a 60-hour round trip schedule, ship specialists perform 51 percent of the annual technical servicing work volume. The remaining technical services are to be provided by shore-based ship repair enterprises, which do ferryboat technical servicing during the time when they have been taken out of service for repairs, during production stopover periods, as well as during trips by specialists assigned to those vessels.

During the time a ferryboat is under repair, in addition to regular repair work, it is possible for another 6 percent of the annual volume of technical service work to be carried out on it. The remaining 43 percent (27,000 man-hours) of the annual technical service volume should be fulfilled by shorebased ship repair

enterprises during the period of production stopovers for ferryboats or by assigning ship repair specialists to travel with the tassels and to do their work there.

Time spent by the ferryboat in operation is divided almost evenly between navigation and its stay in port. From the point of view of technical service production, time spent in port is more valuable than navigation time, inasmuch as the number of brigade specialists sent to travel with the ship is considerably less than the ship-repair people who can all work on the ship at the same time during loading operations in port. That is why it is so important that every hour which the ferryboats stand tied up to a pier be used productively for technical servicing.

It is impossible to achieve the desired results, however, without international cooperation in carrying out such servicing because one-half of the layover time for every ferryboat is spent at a pier in a foreign port. Usual methods used in the organization of urgent repair work aboard foreign vessels has proven to be ineffective for ferryboats because their stopover in port is too short.

Considering these facts, the Bulgarian Maritime Fleet Steamship Line and the Black Sea Steamship Line worked out in 1980 the basic conditions for an agreement on the mutual technical servicing of railroad ferries plying the Il'ichevsk-Varna route.

Plans call for shore-based ship-repair enterprises of both parties to carry out technical service work on every ferry involving an over-all labor consumption of 6,600 manhours (11 per cent of the over-all ferryboat technical service volume).

Bulgarian shore ship-repair facilities will service ferryboat hydraulic drive systems for lifting railroad cars, railroad switches, side ports, ventilation channel covers, plus ship system armature. In addition, these enterprises will do the technical servicing of shipboard engines and will do a portion of the painting work.

Black Sea Steamship Line shore-based repair enterprises have taken upon themselves the servicing of main engines, the diesel engines which serve shipboard power stations, automation equipment connected with power units and loading facilities, communications and electronsvigation equipment, as well as control and measurement instruments.

In addition to this, plans for the technical service work of shore-based repair facilities call for the carrying out of a balanced volume of urgent repair work within the framework of mutual servicing of ferryboats. The labor expended upon this urgent repair work by Bulgarian ship repair enterprises on vessels of the Black Sea Steamship Line for one year is to be equal to that of the same work to be done on ferries of the Bulgarian Maritime Fleet by the Soviet side. The Black Sea Steamship Line is to make appropriate payment to shore-based ship repair enterprises for repair services rendered Bulgarian ferries. In connection with these conditions, the agreement sets up a procedure for calculating the expenditure of labor used in the fulfillment of this work when balances between the two sides are checked.

The amount of labor used in the fulfillment of repair work, which is calculated by every ship-repair enterprise in units usually used for the measurement of labor consumption, is expressed in man-hours, increasing its calculated significance upon the transfer factor. Within the next two years, the size of the transfer factor for Soviet enterprises is to be set at 0.6, with that of Bulgarian enterprises to be set at 0.65.

In the initial period following conclusion of the agreement, shore-based repair enterprises of both parties will carry out the servicing of ferryboats tied up at piers or anchored in port and will also look after individual technical components of these vessels which have been left behind at those enterprises while they are being repaired. As the system of mutual servicing improves, repair facilities will also send their specialists off on trips with the vessels to complete work begun while the ships were tied up in port.

Terms of the agreement provide that technical service work will be carried out on a planned-preventive basis, with urgent repairs performed as the circumstances occur.

The nomenclature, composition, periodicity and labor expenditure involved in technical servicing is to be determined by special registers dealing with the technical servicing of ferryboats and issued by shore-based ship-repair enterprises. During the two-month period following conclusion of the agreement, both sides will exchange such registers. In addition to this, ferryboat directors are to submit quarterly requests for all technical service work being planned. Such repair orders or requests are to be in the hands of steamship line technical service components one month prior to the beginning of the quarter for which the order is being drawn. Quarterly repair orders are necessary in order to ready production at shore repair facilities for them. These quarterly technical services plans will be made more precise through monthly orders or requests for vessel servicing during production stopovers, these to be submitted 5 days prior to the beginning of the month, the plan for which is being defined.

Requests for servicing ferries while they are at sea are to be submitted no later than 15 days prior to the time for the desired arrival of specialists aboard ship. An order for urgent repair work is to be submitted to the proper shore repair facility by radio as the ferryboat moves toward the port in which it is to be serviced. Submission of such a request after the vessel is tied up at a pier is to be permitted. Following review of requests submitted by vessels, shore-based ship-repair enterprises are to notify ferryboat directors of their full or partial acceptance. Lack of notification of the acceptance of repair orders is equivalent to refusal to carry out technical servicing.

With every approach of the ferryboat to port the vessel's directors are to check with representatives of shore repair facilities as to the list of work planned for the ship's stopover at its port of destination. The result of such discussion is the working out of a document plus certain conditions for organizing the technical servicing of ferryboats.

Shore-based ship-repair enterprises of both sides are to organize specialized complex brigades capable of around-the-clock work production, with a succession of shifts and with one responsible brigade leader. Brigade specialization is to be achieved through the simultaneous inclusion of several professions within the brigade. In addition to such brigades, these enterprises are to form groups of engineering-technical workers to organize and to manage ferryboat technical servicing.

Materials necessary for the performence of technical servicing are to be provided by shore repair facilities if the ferries are to be serviced during production stopovers.

Where the ships are serviced during the course of their journies, provision of the material necessary to carry out such work is the responsibility of the ship's owner through the ship's directors. Spare parts or technical means from the exchange funds of shore repair facilities are to be provided by the ship's directors or other representatives of the ship's owners.

In order to reduce schedules for the carrying out of technical service work, this through use of the aggregate work method, the steamship line of the ship's owner is to acquire for its ferryboats the proper technical means from the exchange fund. Replacement of technical means and their units with new (repaired) equipment from the fund indicated is to be done by shore repair facilities after reaching an agreement with the vessel's owner.

Technical control functions in the acceptance of technical service work and urgent repairs are to be exercised by the ship's directors. The work done is to be formulated in formal documents on the acceptance and turnover of the vessel. In addition to this, shore-based ship-repair enterprises are to specify the work which they have done in technical service registers which they submit to the ship's owners. A separate set of technical service registers is to be kept for each ferry-boat.

Mutual technical servicing of ferryboats is to be carried out, on the Soviet side, by the Fleet Technical Services Base and the Il'ichevsk Ship-Repair Yard of the Black Sea Steamship Line and, on the Bulgarian side, by the ship-repair shops of the Bulgarian Maritime Fleet and the Ship-Repair Yard in Varna which, together with the steamship line, belongs to the "Vodnyy Transport" Economic Production Association. Inasmuch as, under the terms of the agreement, certain paragraphs spell out the obligations of shore repair facilities, it has been proposed that ship-repair yards on both sides will participate as full and equal members, on the same basis as steamship lines. On the Bulgarian side, participation of the "Vodnyy Transport" Association in the agreement also has been proposed. Expansion of the compraint of agreement participants will allow us to make a final specification of the conditions acceptable to all links in this system of mutual servicing and will facilitate the uninterrupted functioning of that system.

In January 1981, a more precise edition of agreement conditions, one which considers all aspects of the problems involved in the creation of a system for the mutual servicing of ferryboats, was reviewed by the Soviet side and submitted for study to the Bulgarian side. Conclusion of the agreement on mutual servicing will create the conditions necessary for expansion and improvement of our national systems for the technical servicing of railroad ferries on the basis of international cooperation.

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9643

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CEMA RESOLVES JOINT DEVELOPMENT OF ELECTRONICS INDUSTRY

Budapest MAGYAR HIRLAP in Hungarian 26 Sep 81 p 7

[Article: "CEMA Committee Session On the Joint Development of the Electronics Industry"]

[Text] The 42nd session of the CDMA standing committee on radio technology and electronics industry held in Balatonsseplak, ended with the ceremonious signing of the official record. The three-day conference was attended by delegations from Bulgaria, Czechoslovakia, Cuba, Poland, Hungary, the GDM, Romania and the Soviet Union. Also present and participating in the work was a delegation from Yugoslavia, who attended under an agreement between the GDMA and the Yugoslava government.

The standing committee examined its share of the tasks laid down in the resolutions of the executive committee and the committee on planning, cooperation and technical-scientific cooperation at the 35th session of the CDM, and approved the measures aimed at their implementation. The committee accepted the organisational plan concerning the development of industrial robots and microprocessors which can be used in various branches of the national economy, as well as the specialisation of production and the question of cooperation. It passes a resolution calling for the development of a program of technological cooperation in the production of color television sets and other equipment necessary for color broadcasting.

The CEMA's standing committee on electronics industry accepted an organisational plan, that will promote the realisation of the kind of many-mided cooperation, which is necessary to build a standardised basis for electronic products and for the production of technological equipment, semiconductors and special materials which are needed to manufacture them. Incidentally, the intergovernmental agreement that deals with this matter had been signed at the 35th session of the CEMA. This many-sided collaboration, production specialisation and cooperation is the most important operational task of the CEMA member states. It was for this very reason that in the interest of production specialisation the committee worked out a system of technical requirements for the evaluation of specialised products. In addition they also approved the main directions of product specialisation affecting certain types of semiconductors and integrated circuits.

At the session of the CEMA standing committee on radio technology and electronics they discussed and approved the work plan for 1982-1983.

The session was characterized by objective cooperation, fraternal friendship and complete mutual understanding.

On the occasion of the session, a correspondent of the MTI [Hungarian Telegraph Office] went to see Werner Liebig, assistant secretary of the CDMA, and Imre Sebestyen, department head of the CDMA secretariat on radio technology and electronics industry, to ask them about the forseeable effects of this unprecedentedly close cooperation on the industries of the member states.

The national economic plans of the CEMA member states have called for an annual development of 10 to 15 percent in the electronics branch for the period 1981-1985 —said Werner Liebig.—This is an increase which will significantly exceed all other branches' rate of development, and which will require extensive investments everywhere. At the same time—with the exception of the Soviet Union—will not be able to attain complete self-sufficiency in the manufacturing of the necessary products and components, despite the high expenditures. The steps taken now, at the 42nd session of the standing committee, were to further the realization of the intergovernmental agreement sixed at promoting far-reaching cooperation which, for this reason, is so vitally important.

In his statement, Imre Sebestyen stressed that he considered it extremely important to establish a set of standardized principles and technical parameters which will also determine the direction of the member states' development of electronic industrial components and their purchases of pertinent licenses.

He pointed out, that while the perspective components which are already under production are well suited to become a part of this standardised system of electronic components, the majority of them still swait future development.

It is important that the production of highly pure metals and their alloys, as well as certain special chemicals necessary for the production of modern micro-electronic components be well organized.

The primary function of modern micro-electronic components is to enhance the further development of high-capacity electronic computers, data-process controllers, miniature computers and microprocessors. The production specialization and cooperation of products that are made up of standardised components can be achieved through a much simpler and more rapid process than presently possible.

We cannot neglect the importance of standardised microelectronic components in circuit technology, in the building of data-transmission systems or in telecommunications in general. By making proper use of them, we will be able to modernise such traditional Hungarian export products as telephone exchanges for various use, for example. Data-transmission systems will ensure the safe realisation of computerized information-communication and production guidance, regardless of the distance between their locations of utilisation.

Cooperation in the creation of an electronic component base will also have the effect of expanding the selection of telecommunications products intended for the population and increasing their use-value, serviceability and modernness. The production of color television sets, video recorders and Hi-Fi quality accoustical equipment built of standardized components will be simpler, and a greater volume of mass-produced units will come off the same assembly lines, thus improving supplies to the population.

9379

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COUNTRY NEGOTIATING TO INCREASE PORRIGH CONTRACTS

Helsinki HELSINGIN SANOMAT in Finnish 22 Sep 81 p 25

[Article by Markku Hurmeranta: "Albania Selects Trade Companions with Caution; Honaligned Counties in Favored Position"]

[Text] Albania's mode of conducting foreign trade is quite unique. For instance, that country does not at all approve of foreign credits. This means that, when contemplating a deal, the seller must be able to indicate a reciprocal purchase of precisely equal magnitude. In addition, it is customary in Albania to conduct trade negotiations in leisurely southern fashion, to which style many Western sales shooters have adjusted with difficulty.

In an earlier time, Albania developed its economy mainly under the patronage of it large collaborators, the Soviet Union and China. However, a break in relations with the Soviet Union occurred in 1961 and in 1978 with China. After that, Albania has been cautiously seeking new trade partners.

Western businessmen now frequent the lobby of the Dajti hotel in Tirana in increasing numbers. Some of them are amazed at the lack of privately-owned automobiles, while others yearn for the nightlife they have become accustomed to in the capitals of other countries.

Although the guiding principle for the development of the economy is reliance on its own strength. Albania must perforce buy a large part of its high-grade technology from abroad.

Finnish enterprises currently negotiating equipment consignments to Albania include the Outokumpu, Nokia, and Airam firms.

The break in relations with China caused a considerable setback in the Albanian economy. The Chinese left the country quite abruptly in 1978 leaving behind several unfinished factory construction projects. At the time of the break there were about 3,000 Chinese consultants in Albania.

From purely the point of view of improving the economy, the substituting of China in place of the Soviet Union as a collaborative partner in the early 1960's was already then a backward step, because the Chinase technology proved in practice to be even less advanced than the Soviet.

The Albanians have themselves attempted to complete construction of some of the unfinished factories left behind by the Chinese. But, as the poorest country in Europe, its successes in that endeavor have been quite minimal. For that reason Albania has begun to seek new foreign trade counterparts, mainly from among the nonaligned countries, from some of whom it has requested bids for the completing of certain ones of the unfinished factories.

Albania does not wish, for political reasons, to engage in trade with either the United States or the Soviet Union. Hor does it approve of Spain, South Africa, South Korea, and Israel as foreign trade counterparts.

The lack of diplomatic relations with the United States has not, however, precluded the infiltration of United States oil well drilling equipment into the Albanian oil fields. The trade that occurs by way of Switzerland is unique in character.

Several Finnish Endeavors Underway

Trade between Finland and Albania has not yet gained momentum despite a trade agreement that was concluded during 1980. However, negotiations are currently underway concerning several Finnish projects that are of considerable interest to the Albanians, but attaining agreement in matters of price has proved to be even more than ordinarily difficult.

"Finland has technology of the type, especially in the field of mining, in which we are quite interested," says Makinaimport deputy director Pajtim Ajazi. Makinaimport is one of the six state enterprises through which all of Albania's importing take place. This enterprise is responsible for all of the country's machine and equipment purchases.

The largest Finnish project under negotiation involves the bid requested from the Outokumpu firm for a nickel refinery equipment purchase. The Elbasan kombinat factory located in central Albania is one of the construction projects left unfinished by the Chinese.

According to Outokumpu estimates, the delivered cost of the nickel processing equipment would be slightly in excess of 100 million Finnish markkas. But Director Ajazi is talking in terms of a deal that amounts to under 70 million markkas computed at the present exchange rate of the dollar. Megotiations approximating these terms are currently in progress in Tirana.

The Chinese technicians appear to have had a truly sudden departure three years ago. "The construction site appears as if the workers had left merely for a coffee break," according to a description of unfinished work in factory aisles given by a Finnish trade negotiator. During the three years, scattered machine parts and tools have not even been touched.

Director Ajazi sees many possibilities for collaboration with the Outokumpu firm. The intention is, after possible conclusion of the nickel refinery deal, to request a bid from Outokumpu for a ferrochromite plant. The Outokumpu copper refining process is also of interest, according to Ajazi.

The Outokumpu firm has had trade relations with Albania for many years. The firm has purchased ferrochrome from Albania and a considerable amount of other concentrates.

Albania is quite rich in natural resources. For instance, she is the world's third largest producer of chromium and the second largest exporter. However, Albania did have export difficulties in 1980 because chroma exports to the West dropped by one half. For that reason there are stockpiles of chromium ore estimated at 300,000 tons at the harbors.

Airam Battery Factory Negotiations

Makinaimport is currently negotiating with the Finnish Airan firm for the machinery of a battery factory. At this time Albania has in operation one factory in this field built by the Chinese but it is hopelessly putdated.

The value of the projected battery factory is several tens of millions of markkar. According to Ajazi, the final negotiations of that deal will be concluded during the last half of September 1981, at which time the Airam negotiators are expected in Tirana.

The Finnish Mokia firm is offering machines for the rubber factories under construction in the harbor town of Durres. The first phase of the negotiations has involved an automatic weighing and feeding system valued at about 6 million markkas.

The G.inese managed to complete construction of five of the buildings of the rubber factory that they had begun, but time did not suffice for delivery of the machinery. The Albanians subsequently purchased needed machinery and equipment from Conchoslovakia and elsewhere to continue the work of the Chinese. The first phase of the factory was put into operation in 1980.

Should the deal that the Mokia firm is now negotiating materialise, then in the next phase that firm will be able to offer the needed equipment in the value of 30 million markkas.

Finland's exports to Albania amounted to slightly more than 300,000 markkas in 1980. The imports that year exceeded 3.7 million markkas. The main item of export to Albania has been synthetic fiber thread, but the final shipment of that will take place in 1982 when the Finnish Sateri firm terminates production of that item.

In addition to minerals, the imports to Finland have included fish perserves, condiments, textiles, and smoking pipes, which have found considerable favor among tobacco smokers.

Yugoslavia Largest Trade Partner

Albania's most important trade partner in 1979 was Tugoslavia, which accounted for 13 percent of the country's entire foreign trade. Caschoslovakia was in second place and Rumania in third. The German Federal Republic is statistically in fourth place, although diplomatic relations do not exist with that country. The concluding of relations has been stymied by disagreements concerning Albania's demands for war reparations from the German Federal Republic.

In all, Albania engages in trade with about 50 countries, and it has diplomatic relations with more than 90 countries.

Ample Natural Resources Basis of the Economy; Oil and Electricity Suffice for Export

Albania's mineral and energy reserves form the backbone of the country's economy.

Albania produces all of its own energy needs. Emmes production of oil and electricity is exported.

Using quite outdated well-drilling technology, Albania produced a total of 3.5 million tons of crude oil in 1980. The exported refinery products included diesel fuel oil and low octane gasoline purchased by the German Pederal Republic, among others.

Albania's oil production began during the period 1956-60, when China and the Soviet Union were vying to support the Albanian economy. The new oil wells have revealed also the existence of natural gas reserves, but exploitation of these is only in the beginning stages.

Albania has coal reserves also, and that production has increased five-feld since 1960. A considerable amount of the coal is amounted to Russia. The total output of the oil, electric, and coal industries increased by 25 percent during 1980.

The Albanians are willing to reveal very few actual production figures. The developments that take place are most frequently expressed in terms of percentages. Another favored method is to state how many times greater present attainments are than those in periods prior to 1944, the year in which Albania became a socialist country.

Waterpower As Source of Deliverance

The greatest blessing, however, in the Albanian economy is water power, and it has occupied first place in the developing of the economy throughout the existence of the republic. The countryside now has electricity even in the smallest villages. In addition, electricity is exported to Yugoslavia, Greece, and Rumania. Over 80 percent of the electricity is produced by water power. The most important source of hydroelectricity is the Drini river, which currently has two extensive hydroelectric plants in operation. A third installation, the so-called Koman generating plant is currently under construction. It will have an output of about two billion kilowatt hours a year.

A fourth, the Bushat generating plant, is due for completion during the new 5-year plan to be published in Hovember 1981. A fifth plant in this river, the Eksvic generating plant, is scheduled to go into operation by 1990.

The never generating plants have been constructed to a large extent on the basis of technology purchased abroad. Finland also has been interested in these projects, but thus far collaboration has not been agreed to. The Finnish Notex firm has already, jointly with the Swedish Assa firm, made an offer to supply a hydroelectric plant for 350 million markkas, but the negotiations lapsed during July 1981 and have not since been resumed.

Exports to Increase

Albania has set a goal of doubling its exports during the new 5-year plan. The other objectives are quite ambitious as well, and when viewed as percentages based on a low-level starting point, appear quite admirable. The intention is that by 1985 industrial production will be increased by about 35 percent, agriculture by 31 to 33 percent, the national income by 33 to 35 percent, and similar increases in other categories.

At this time Albania has underway construction on 107 new industrial projects, of which 75 should reach completion within a year.

Albania had difficulties, uninly agricultural, during the 5-year plan that ended with 1980. Progress in all industrial establishments was not quite according to plan either. "The biggest problem in the Albanian economy is inefficiency. We must strive constantly to raise the productivity of labor," according to director Niko Sima of the state planning commission. This organ operates under the direct control of the prime minister, and its functions include the drafting of the 5-year plans for the country.

The intent in the new 5-year plan that is to be officially proclaimed at the 40th anniversary convention of the Albanian Labor Party in Movember 1981 is that this is to be the first plan that will be carried to completion without incurring any foreign indebtedness. Albania repaid debts to China during the first two years of the previous 5-year plan.

When measured by the gross national product, Albania is the poorest country in Europe. According to the statistics published in 1978 by the World Bank, Albania's national product was 740 dollars per capita. Feru and South Korea were among the countries that attained a similar figure during that year.

5955

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DECREE ON THE ESTABLISHMENT OF 'WORK COLLECTIVES' PUBLISHED

Budapest MAGYAR KOZLONY in Hungarian No 53, 9 Sep 81 pp 731-733

[Decree No 28/1981 (IX. 9) by the Council of Ministers, on Work Collectives]

[Text] On the basis of authorization contained in law decree No 15 of the year 1981, the Council of Ministers orders the following:

Paragraph 1.

- (1) Private persons may form economic work collectives (hareinafter: work collectives), which will not be legal entities [legal persons], by means of association contracts, for the purpose of performing consumer's and other services, small-scale production and activity supplementing the activities of economic operating organizations, and for the purpose of organizing and promoting these.
- (2) Work collectives may also be formed for the purpose of organizing and promoting commercial activity, but the work collective is not permitted to engage in commercial activity.
- (3) Private persons—including private tradesmen—may enter into association contracts only on the basis of this decree for performing such activities defined in Sections (1) and (2) for which otherwise a permit (industrial license, operating permit, etc.) from the authorities would be necessary. This decree does not effect the occasional working associations of tradesmen.
- (4) The tradesmen in addition to his membership in the work collective may also operate as a tradesman.

Paragraph 2.

- (1) The work collective's task is to contribute in its sphere of activity to better fulfillment of society's needs.
- (2) The rules governing civil legal associations (Civil Code, Paragraphs 573-574) are to be applied as appropriate for establishing, organizing, and operating a work collective, as well as for the responsibilities of the members, and for the liquidation of a work collective, with the deviations therefrom contained in this decree.

Paragraph 3.

- (1) A work collective may be set up by association contract by at least two and a maximum of 30 members.
- (2) A work collective must not have such persons as its members who:
- (a) are already participating as members in another work collective;
- (b) is not permitted to practice trademan's activity due to having committed a crime.
- (3) The regulations contained in other statutes must be applied to authorize employed persons or members of cooperatives who are obligated to perform work to become members of work collectives, and to the reporting obligation related to this.

Paragraph 4.

- (1) Approval by the authorities is necessary to validate the association contract. Any other necessary permits issued by other authorities to conduct the activity, and in the case of activities for which qualifications are needed, proof of the qualification(s) of the member(s), and in the case of work area (activity) requiring suitable: health, the medical opinion must also be attached to request for approval.
- (2) The request must be submitted to the first level of authority as applicable at the location of the work collective. The first level authority is invested in the specific administrative organ of the executive committee of a municipal council or a capital city district council exercising authority over the area of the work collective's activity, the district office of a magye city [a city with megyé's rights], or a jaras office (hereinafter: administrative organ).
- (3) Approval of the association contract can be denied only if the contract violates a statute.

Paragraph 5.

- (1) After approval of the association contract the administrative organ enters the work collective into the record. The record must contain the work collective's name, headquarters and sphere of activity, the names and residence addresses of its members, its representative's name, and also the date the association contract was approved.
- (2) The work collective must also be registered in the registry of firms. In registering, the firm registration regulations concerning associations with joint income apply.

[Paragraph 6. Deleted by JPRS]

Paragraph 7.

The work collective operates under a community name; the names of persons founding it must not be part of the name. The work collective's name must contain reference to its activity.

Paragraph 8.

- (1) Within the sphere defined in Paragraph (1) the work collective may conduct any activity except those which law, legal decree, an order of the Council of Ministers or a resolution by the Council of Ministers assigns exclusively to the sphere of activity of state operated economic operating organizations.
- (2) The statute dealing with the sphere of economic activities of cooperatives requires advance approval for certain activities. Work collectives may also perform these activities on the basis of advance approval by the branch minister or by the administrative organ of the executive committee of the megye (capital city) council with authority over the activity. Approval can be refused only if the technical or other professional conditions for conducting the activity are absent, and cannot be created.
- (3) This regulation does not affect the orders of those special statutes which require permits for conducting certain activities, and which require special qualifications for conducting certain activities. The work collective may conduct activities requiring qualifications only if there is a person among its members who satisfies the qualification requirements determined in the special statutes.

Paragraph 9.

- (1) The work collective's headquarters is the place where the activity defined in the association contract is conducted; if this cannot be determined, it is the permanent residence of the representative designated in the association contract.
- (2) The work collective's headquarters must be marked by a signboard.

Paragraph 10.

- (1) One or more members (hereinafter: representative) designated in the association contract are authorized to handle the work collective's affairs and to represent the members in the course of handling such affairs.
- (2) If, according to the terms of the association contract, more than one members have the authority to handle the affairs and if these members may proceed only together, only one of them may also take unpostpoubly urgent measures if by doing so he prevents damage from occurring to the work collective.

Paragraph 11.

(1) If the designated member handles the affairs unsatisfactorily, or if the representation is implemented unsatisfactorily, the other numbers have the right to lodge a complaint; the argument will be decided by the majority of the numbers.

- (2) The majority of the members may take away the representative's authorization.
- (3) If it is necessary to create an organization to handle the work collective's affairs, the head of this is the representative designated in the association contract. The representative may delegate some of his rights to the business management organization's employees if necessary in connection with managing the business and representation. But in this case he is as responsible to the members as if he himself acted.
- (4) The work collective's members have the right to be personally informed about how matters are progressing. For this purpose they may request information from the representative, and may also inspect the books and documents of the work collective.

Paragraph 12.

The members are required to personally cooperate in the work collective's activities. The work collective may employ family members and employees to help out, as well as subcontractors and trade school trainees.

Paragraph 13.

- (1) The work collective with 2 to 5 members may employ 2 employees, with 6 to 10 members 4 employees, with 11 to 20 members 8 employees, and over 20 members 10 employees. Subcontractors may be substituted one-for-one for employees.
- (2) A tradesman's employees are not counted towards the work collective's number of employees. But the total number of the tradesman's and the work collective's employees may not exceed 30 persons.
- (3) The employer's rights over the work collective's employees are exercised by the representative in the work collective's name. He is not permitted to delegate this authority.

Paragraph 14.

- (1) The work collective may employ a trade school student if there is a person among the members, employees or family members helping out with the qualifications of journeyman corresponding to the trade school student's trade.
- (2) The number of trade school students is governed by the regulations applicable to the number of employees, with the difference that the number of trade school students must not exceed three times the number of journeyman members, employees and family members helping out in the same trade, in each of the trades.
- (3) The subjective and objective conditions of employing a trade school student not covered in this regulation are governed by the rules of training trained tradesmen.

Paragraph 15.

- (1) The work collective may employ family members to help out without limits. Family members who help out by personally doing work regularly must be reported to the administrative organ.
- (2) Helping family members are the spouse, life companion [sic!], direct line relative, adopted, foster or stepchild, and adoptive, foster or step parent of the work collective's members who do work regularly.
- (3) The helping family member's activity qualifies as work which cannot be considered employment. Time spent in such capacity must be recognized as practice of a trade by the rules of trade practice.

Paragraph 16.

The work collective conducts its economic activity by jointly owned or jointly used tools based on the financial contributions of the members. In order to perform its tasks it may rent, lease or make use of tools owned by the state or by cooperatives, including ones the statutes otherwise do not permit privater persons to use.

Paragraph 17.

The orders of statutes dealing with providing space for community organs must be applied to secure rooms necessary to conduct the work collective's activity.

Paragraph 18.

- (1) The administrative organ provides government control over the operation of work collectives.
- (2) The purpose of government control is to investigate and essure that the work collective's operation is in agreement with the regulations of statutes and the association contract.
- (3) In case of violation of the statutes, association contract, government regulations and trade rules, the administrative organ issues a written warning to the work collective through the representative.
- (4) The administrative organ may liquidate the work collective if
- (a) it violates the statutory regulations severely, or repeatedly in spite of warning;
- (b) it performs unprofessional or poor quality work, and received repeated warnings because of this within one year.

Paragraph 19.

Liquidation of the work collective must be without delay reported to the administrative organ with which it was registered, and to the court of registration.

Paragraph 20.

- (1) The economic operating organizations and the state budgetary organs (hereinafter together: the enterprise) may support work collectives formed by the participation of their employees and retirees by supplying tools, providing rooms and in other ways. The relationship between the enterprise and the work collective, and within the framework of this the support and its conditions must be defined in a separate contract.
- (2) The general rules for work collectives must be applied with the modifications contained in sections (3) through (6) to those work collectives which consist exclusively of the employees and retirees of the same enterprise, uses primarily the enterprise's facilities, and for the activities of which the enterprise accepts responsibility (enterprise work collective).
- (3) The enterprise manager's advance consent is necessary for approval of the association contract; the consent may involve conditions. In case the consent is withdrawn the administrative organ is required to liquidate the work collective.
- (4) Reference must be made in the enterprise work collective's name to the name of the enterprise. The enterprise work collective's headquarters is the enterprise's place of business.
- (5) The enterprise work collective may not employ helping family members, employees, subcontractors or trade school students.
- (6) Members of the enterprise work collective are responsible for the work collective's obligations only to the extent of monetary contributions they made to the work collective and the incomes they earned there. Obligations of the enterprise work collective exceeding this are the enterprise's responsibility.

Paragraph 21.

- (1) This decree becomes effective as of 1 January 1982.
- (2) This decree does not affect the operation of work collectives (creative collectives) established on the basis of special statutes.
- (3) Civil law associations established prior to the effective date of this decree may elect to continue their activity on the basis of the earlier regulations, or may transform themselves into work collectives operating on the basis of this decree.

/signed/ Gyorgy Lazar, president of the Council of Ministers

8584

CSO: 2500/8

SECOND ECONOMY DEEMED COMPATIBLE WITH SOCIALISM

Budapest MAGYAR HIRLAP in Hungarian 13 Sep 81 p 5

[Article by Andras Tabori: "Small Enterprise"]

[Text] Small state and cooperative enterprises are being established becoming legal immediately and activities benefiting the public good based on private enterprise are integrated into the socialist sector whether they are carried out as a principal occupation or after working hours.

How can this be adapted to our socialist value system? Has our stand been modified with respect to the relationship of small-scale production versus big enterprise and the superiority of large enterprise? Have we considered the risk of spreading petit bourgeois thinking? In order to answer these questions, it is vitalfy important to place the new regulations in perspective. The realization that socialism is a production system and that society is part of the broader antecedents so much so that the 12th Party Congress deemed it necessary to pass a resolution to this effect: our economic policy "takes it into account that commodity, monetary, and market conditions are also an integral part of the socialist economy based on the public ownership of the means of production and on socialist planned economy." In contemporary terms in this country this means that the organizational system of the economy has to conform to concrete conditions with respect to goods, entirely new factors of domestic and foreign market demands and not to traditional presumptions. That is why the Central Committee has decided to modernize industrial management emphasizing that the development of central direction and enterprise structure of industry has fallen behind economic planning and regulation.

This backwardness was also characterised by a peculiar process of the decade of the 1970's: the number of enterprises was decreasing year by year. Large enterprises found it in their interests to attain supplemental income sources by absorbing small enterprises. This became so widespread and lopsided that between 1970 and 1979 the number of state-owned industrial enterprises decreased from 812 to 702, industrial cooperatives from 821 to 673, state farms from 184 to 131, and commercial enterprises and cooperatives from 946 to 603.

In justification the reasons advanced were that this was the way of modern concentration process, although in quite a number of sectors it was only a question of rigid centralization and excessively costly acquisition of cooperating partners with the assured promise of stability of production. These enterprises paid for these

mergers with extra expenses and structural rigidity because of constricted support industries. (For instance, according to 1977 statistical data 80 percent of metallurgical and machine industry plants operated their own machine-tool shops.)

The new regulations are going to establish a better balance between small and large by using the yardstick of the social demand which, however, should not be construed at all that socialist development is now to switch over to the track of the "small ones" after the age of the "big ones." It would be non-sensical to presume that the enormous national efforts of restoring the balance, the epochal challenge of intensification henceforth would be solved by franchised groceries and industrious small craftsmen. The avant garde of economic development are the numerous first-rate sectors and big enterprises! It can be inferred from this that the position and stature (not to be afraid of adjectives), their esteem and honor are by no means diminished, they are only differentiated.

Stature cannot be in direct proportion to size, however, it must be proportionate to its benefit to the public good and to the achievements of the spirit of enterprising. That is why it is imperative that regulation should take into account the new effects of conditions and of income differentiation by increasing the chances and opportunities of deserving big enterprises. This is further promoted by the small enterprise environment in part by the reduction of cooperative needs, and in part by the fact that if big industry does indeed start on the road to intensification, it will inevitably release manpower, and present arguments about "small enterprises siphoning off manpower" could completely turn around-small enterprises may provide employment. Mevertheless the open question is: what can be expected from the regulation of illicit black market activities, from the social legalization of this traditionally improper notion? First of all, it is good to know that this is not a domestic specialty in spite of our misconceptions. A report of the AP news service has indicated that so-called black market activity, one which escapes bookkeeping and taxation, amounts to 25 percent of legal economic production in France and 35 percent in Italy, respectively. Of course, this alone is no argument for its legalization in this country. However, a very strong argument for it is that at issue here are supplemental energies that carry out an enormous amount of work investing savings and meeting the needs of society, mostly in the form of services. According to estimates of experts, approximately 3-3.5 million active wage earners and 1-1.5 million pensioners, i.e., half of the population, some three-fourths of all families are presently engaged in supplemental activities to greater or lesser degree. It is not only impossible but also impractical to suppress these energies; to replace them by the production of large enterprises is unimaginable not only because of investment costs, but it is also insensible due to the continuous extra expenses of fragmented operation (not to mention activities that are irreplaceable by public organization of labor which are called in a shockingly technical but graphic expression "refuse manpower capacity").

However, in judging the present situation it is not necessary to rely only on dry facts and abstract assumptions given the fact that our recent past is replete with experiences seasoned in debates and gained by paying the requisite price. Thus the example of farming small household plots indicates that useful private activity can be put to serving the public good. By taxing it and properly controlling it advantage can be gained in the improvement of living standards based on labor and in the expansion of the distribution of goods and exports, which is no small achievement nowadays. And should the socialist sector become the integrator, the expected social returns will far exceed the disadvantages.

Of course, there are disadvantages and calculated risks both in ideological impacts and in the differentiation of income, and in the institutionalized rearrangement of the utilization of leisure instead of its black market use. Nevertheless, no risks but the certainty of strong disadvantage must be faced if all value producing energies are not utilized now. Our thinking, the economy, and the country at large are troubled by scarcity, excessive costs, and inflexible rigidity and our situation can be improved both materially and with regard to our well-being if the facts are acknowledged as reality, and regulation, organization as well as enterprising endeavours are adjusted accordingly.

Fundamental and essential interests of socialism are best served by the courage to face ourselves as we were yesterday; our customs, conditioning, institutional methods and to contrast these with the new demands and challenges of our time. Advantages and disadvantages can only be measured in this way.

9133

CSO: 2500/359

NEW ENERGY CONSERVATION METHODS DESCRIBED

Budapest NEPSZAVA in Hungarian 19 Sep 81 p 1

[Article: "Energy conservation with new methods: 1 rigade initiatives, enterprise measures—waste gases put to work—corn stored by refrigeration instead of drying"]

[Text] In contrast to the original plan, energy consumption in our country during the first half of this year has not grown but has declined by 2 percent, which can only partly be attributed to an improvement in energy management. For industrial production has only grown slightly, the energy-intensive mining, construction materials, and chemical industries have not reached their planned levels, and the structure of production has been somewhat transformed. An increase in wholesale prices by energy suppliers and a favorable average temperature last winter have also contributed to a moderation of energy use, but the results of conservation and energy rationalization are also beginning to be felt—even though not yet to the desired degree.

The fastest results have been obtained in reducing or eliminating waste, particularly through initiatives of socialist brigades in many places. In many places devices have been installed that automatically shut off the flow of energy when the machines are running idle. By this method, for example, the Peace and Friendship brigade at the heavy machine factory of the Caspel Works Special Machine Factory in Kaposvar is saving electric energy in the amount or 10 million forints monthly. Out of the 53 socialist brigades at the Somogy and Zala Counties' Brick and Tile Manufacturing Enterprise, 40 worked out larger or smaller suggestions for improvements. For example, in the brick factory at Teskand, the members of the Sandor Petofi kiln brigade so far have saved gas worth 80,000 forints this year, and following their example the factory collective will produce 10 percent more bricks than planned, 37 million bricks, with less energy.

At the Beremend Cement and Lime plant, the method developed by Jozsef Alfoldi, director of the cement operation, by which some of the waste gases generated in the kilns are put to work, has proven to be an outstanding idea. The waste gases are piped into the drying rooms, and this saves heating oil worth 13 million forints a year. The enterprise not only makes innovations, but the possibilities for rationalizing [the use of] energy are taken into account already in the planning for investments. The recently opened, modern, two-shafted kiln at the lime plant uses only one-third as much heating oil as the old one, and this results in an energy saving of 9 million forints a month.

Often several enterprises are joining together to save energy. For example, Rabater: in Gyor and the city alcohol factory have concluded a cooperative agreement, on the basis of which the textile factory will receive from the alcohol factory the 80 cubic meters per hour of heated water at 70 degrees [Celsius], which formerly were wasted. They can use the heated water well for heating and also for preparation of textiles. The pipelines connecting the two factories are ready, and now the steam distribution center and the filtering station are being installed.

In agriculture, new technologies have been developed for harvesting and storing that will result in a saving of energy in the drying of corn. Every ton of corn stored without drying saves 30 to 40 kilos of diesel fuel. The method of preserving corn by refrigeration, which was introduced in October during the Babolna fair, is attracting much attention with specialists. The technology, which is already in regular operation at the state farm in Komaron, has shown that the costs of the cold storage equipment can be recovered in savings within a year. The essence of the method is that refrigeration units are built into the storage tanks, and this regulates the humidity. By this means corn with a moisture content of 18 percent can be stored, as compared with the usual 12 percent. For every ton of produce, 10 kilos of diesel fuel can be saved by this method, in addition to which the quality of the produce can be better maintained. The Joint Enterprise for Industrial Production of Corn at Babolna, together with the Komaron farm and the Refrigeration Technology Industrial Cooperative at Tata, recently established a management association to spread the method throughout the country. Not only the technology, but also the equipment itself will be distributed to the large operations that order it.

9611

CSO: 2500/382

PROBLEMS, FUTURE OF SMALL ENTERPRISES, ENTERPREMEURSHIP VIEWED

Budapest NEPSZABADSAG in Hungarian 20 Sep 81 p 4

[Article by Pal Botvos: "What Can the Small Enterprise Produce?"]

[Text] Statutes dealing with the various forms of enterprises are being published one after the other in recent weeks. This leads direct timeliness to the questions concerning the so-called small enterprises and the development of small-scale production. But the sphere of topics is far from being new for the general public. Even within the last year our readers sew it in the columns of our paper—we supported it.

However, we get used to it and learn it slowly that in the interrelationships of our economic life there are hardly any measures indisputable from all viewpoints, and free of contradictions. At the most we can ask that each decision be as good as possible, involve as few contradictions as possible. Thus it is only natural in this case also that a whole series of questions comes up in the public opinion about an initiative which contains a number of new elements. These questions and their answers are particularly important in this case because the way the public opinion reacts to them will have a decisive affect on the ideas related to small-scale production. Will it accept its goals with understanding, and will it help resolve its inevitable contradictions?

Everyone In His Own Place

The most general reason for the initiative is the excessive centralisation of our industry, and even more so the absence of workshops employing a small number of people. Besides us constantly feeling the effects of this, international comparisons also illustrate our industry's lack of proportion. In industrially developed countries which are comparable to, us in size, three-fourths of the people employed in industry generally work in small plants, while the entirety of our industry is made up of seven hundred and some enterprises. The ratio of large enterprises in our country is higher than in the Soviet industry, the size of which can hardly be compared to ours.

The reasons for this, which can be sought in history and in the developments of the recent past can hardly be detailed here, if for no other reason than because it is more important than this to establish: the standards our industry has achieved, and the requirements made on production are urging that this structure be reviewed. The ratio of large, medium-sized and small enterprises in a country's industry—apart from certain traditions and given natural conditions—are determined by viewpoints of practicality. Certain activities can be conducted efficiently only above a certain plant size. Only a large plant can efficiently produce generators, rear assemblies, boilers and many other things, technically as well as from the viewpoints of the market and intellectual supports. This also makes the necessary market flexibility possible, which is necessary to remember because—in contrast with what one often hears today—not the medium-sized and small enterprises are the flexible ones, but in certain activities certain enterprise sizes are flexible, and able to adjust. The same way, there are activities which only smaller organizations can perform efficiently, and if these organizations are absent, the large industry, the supply of goods as well as the services will feel it. And in this country there is no appropriate organization to produce shorter runs changing in size, material and shape, the industrial "accessories" needed in many places, and utility equipment subject to style changes.

Thus the small and medium-sized plant organization receives and enjoys no support today against the large plant. It would be—and is—much more to the disadvantage of the large plant if we asked—ask—it to do something it is practically incapable of doing.

How Large Are the Frameworks?

One of the events of the necessary transformation of this organization is the series of statutes now being published, dealing with the small enterprises and small enterpreneurships. Prior to this, extensive organisational measures ran their courses in the state-operated large industry: some units, factories, plants ripe to do so have split off the large organizations and became independent. The statutes we are speaking about, are putting in order the lower sphere, the fate of the smallest units, through the possibility of establishing small enterprises, small cooperatives and economic working associations. At the same time they also couple this with creating much broader opportunities than now exist for performing the so-called auxiliary activities. A very significant work capacity will thus receive an organized framework, and on the other hand enterprises which for the most part are now operating as wild offshoots are being shepherded to within a legal framework. As far as the latter is concerned: without emaggeration, it is a unique attempt to herd the domestic equivalent of what to a greater or lesser extent operates also in the other socialist countries as a "second economy," or what extensively operates in some capitalist countries as "black market economy," to within legalized and hopefully controllable forms.

A new series of questions begins here. What can we expect, really, how broad will be the frameworks? Does it not have any dangers? Won't it cause any tensions in income? What will its effect be on the large-scale industry?

A clear answer can be given only to the first, the basic question. That is, the overwhelming majority of these formats is very closely connected to our state enterprises; another portion of them is a cooperative format, a simpler form but similar to the present one; and finally, as far as the expressly private initiatives are concerned: we can borrow an example from agriculture where, over a certain limit, these are automatically linked to without exception to a large

operation or to the AFESZ's [General Consumer and Marketing Cooperatives], because without their support of breeding stock, trade knowledge, fodder and sales network these would go bankrupt even in spite of streamous labor from sum-up to sum-down.

As far as linking the initiatives, enterpreneurships, and auxiliary activities to the large plants is concerned-changing the things that need to be changed-, the broadly tried and true small-scale agricultural production, the household plots and auxiliary farm operations can serve as the general example here, except for one aspect. More than one-third of the agricultural production is derived from this source, or more precisely: it appears there. The forms now developing can provide obviously only a small fraction of industry's production (of course, a higher proportion of the services). Neither the chemical industry's, nor metallurgy's, nor mining's but not even the machine industry's nor the clothing industry's wagons will receive a boost from here [sic], and it will hardly be these new opportunities which will insure the fulfillment of our 5-year plan. Thus, what remains is the old solution, the work performed in the past-we might say, with some irony, of course without any underestimation of the significance of taking the initiative at all. But the effect of this can be expected more in the decrease of shortage items, in better industrial services, in supporting certain initiatives, in implementing some goal-oriented tasks and detail activities, and mostly perhaps in the improvement of services, and this is no small accomplishment.

The Conditions of Understanding

Just this much more about sizes and frameworks: it is an old finding that we lack willingness to take the initiative, and enterpreneurial desire. This finding was also proven recently after introduction of the commercial hospitality rental system which was also received with much doubt: to this day many restaurants and small stores are waiting for enterpreneurs—in vain. Thus the enlivening of enterpreneurial desire can also only be hoped for from the new opportunities, rather than be certain about it. In a negative sense this may also be a barrier to small enterpreneurships.

To a certain extent the small enterprises also create opportunities for the surplus local manpower which becomes available due to product changes and the market's effects. Along with the general shortage of manpower, such local manpower surplusses do exist even now. They create certain limited opportunities also for manpower becoming available perhaps through a more vigorous upswing in intensification, and through more rational manpower management.

And so far as the tensions are concerned: the few thousand or few tenthousand people who will be "suctioned away" from industry by the small enterprises will be felt as a loss probably not because of their numbers, but because these will presumably be people with knowledge, enterprising ability, who are willing to take the initiative and who want to work. But our industry is badly in need of such tension, and will perhaps force our enterprises to appreciate their experts more. It is a different question that the conditions of this appreciation must also be insured for the enterprises better than is being done now, so that their conditions be the same as those of the small enterprises, cooperatives and enterpreneurships in the competition for experts, specialists.

Some conditions are also still missing: such are, in our opinion, the operation of the appropriate control and taxation systems. This is because our experience in these areas is quite limited. However, this is one of the key questions in making the enterpreneurial forms also really enterprises, the scene of actual work. Understanding by the public opinion is not missing, if they see generally hard and useful work for the public interest behind the inescapably higher incomes. We can count on this understanding even more so because no one is excluded from participating in these initiatives, from trying out their knowledge, know-how and conscientious work. However, not so much patience and public opinion honoring the enterprising ability can be expected if greater than the unavoidable number of soldiers of fortune and people who like to fish in troubled waters appeared in the vicinity of these initiatives. And the way public opinion develops, will be a decisive point in the small enterprises also becoming useful building blocks, solid units promoting our progress, in our socialist national economy.

8584

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HUNGARIAN REACTION TO STEEL INDUSTRY CRISIS NOTED

Budapest MAGYAR HIRLAP in Hungarian 23, 24 Sep 81

[Article by Ilona Kocsi: "The Steel Crisis"]

[23 Sep 81 p 7]

[Text] Domestic Metallurgy in Difficult Situation-Plans at Diosgyor

Debates are again breaking out in connection with the fact that the metallurgical crisis affecting the entire world has not spared the Hungarian manufacturers either. Export prices have dropped, there are fewer orders, and so some of the machines are periodically idle. What can be done about the crisis? We sought an answer to this question first at the Lenin Netallurgical Works and then at the Ozd Netallurgical Plants.

The ominous signs strengthened toward the end of the past year. It was in vain that the Hungarian steel industry ended the year with a good profit. Everyone already knew that this was only an appearance, that the problems would soon come to the surface. The Hungarian steel industry could begin the new year with fewer orders, shockingly low prices and ominous hopes.

But before we take a position pro or con concerning domestic steel manufacture let us look at a few figures. Domestic enterprises use about half of its production, only the remainder goes to capitalist markets or socialist countries. At present about 75,000 people work in metallurgy in Hungary. The gross production value of the branch is more than 60 billion forints; the dollar export-import balance has always been positive in the last 10 years. But it is also true that the price of the necessary materials and fuels has continuously increased while that of exported steel products decreased this year. In other words, the export which had been profitable earlier became or could become unprofitable...This, however, can make doubtful only the future of capitalist export and not the basic task, supplying the domestic market. According to the calculations import—taking into consideration transportation, duties and handling costs—would cost more than the domestic products by 60-80 dollars per ton.

After this general survey let us look at the details. Of the three giants of domestic metallurgy-the Danube Iron Works, the Lenin Metallurgical Works (LEM)

and the Ozd Netallurgical Plants—the crisis has affected primarily the latter two. In our two-part article we will report on their problems and their search for paths.

At A Loss

"We really had few orders at the beginning of the year," reported Dr Sandor Szeppelfeld, director general of the LEM. "Not only the capitalist customers but our domestic partners also cut back their steel use. And if they did place orders they offered such depressed prices that we did not went the business. In order to turn the forced reduction in production into some sort of advantage we went shead with a few large improvements and thus kept people employed. After that we began to manufacture those steel types which—lacking anything better—we could use ourselves later. So we have bridged over the problems thus far—now we have to get some orders."

All the more so, because the LRM has a modern fine steel rolling works and combined steel works where they can undertake manufacture of quality steel. Now, however, the new installations represent a burden; the loan assumed for their construction has to be paid off. So far they have been able to but it is doubtful if there will be enough money for repayment now. Last year the giant factory closed the year with a profit of almost 500 million forints; in this year's plan, however, they are counting on a deficit of 600 million. No, this is not a typo or an error; in one year the profit has become a loss of the same magnitude. The new steel works, of which only the first phase is operating for the time being, will be a factor significantly increasing costs until production reaches the planned level.

The timing was not too good—that much is certain. The combined steel works began operation at just the most critical juncture. Karoly Sotet, the economic director, sees it this way too, but he adds:

We Must Develop

"I came here in 1950. If I recall correctly since that we wanted to develop steel manufacture on at least ten occasions. In vain, there was no money for it. Such expensive investments cannot be imagined without state credit. This was the situation with the fine steel rolling works also; if we had done it earlier, exploiting the boom, we could have paid off the loan in 3 years. But there is one thing we should not forget, we had to develop the combined steel works—independent of the market situation. The old equipment was slowly becoming dangerous, we could not postpone replacing it. So in the first place we justified it as an investment to protect the workers, which, naturally, was accompanied by an improvement of the technological level. If we had to decide now we would still vote for the development. We have always had a profit since 1968. When we criticize metallurgy and question its existence we should not forget its achievements in the past. It is true that we are working very largely with imported primary materials and fuels, but they were always under the value of the export. Up to now we also contributed to improving the economic balance...."

We went through the giant factory with Lajos Dutko, production chief engineer. In the new steel works investment is continuing along side the work. There are idle workers on both sides. For the moment they have nothing else to do but watch the casting, take samples and see that things are going properly. There is no need to intervene in the programmed manufacture. Primitive conditions reign in the foundry and forging works. There is a gigantic contrast between the old and the new. There is much manual work here; often pieces of steel weighing several thousand kilos have to be moved and forged by hand. There a crane moves the cauldrons of glowing crude iron, tipping them for the casting.

"Basic manufacture takes place with modern equipment," the chief engineer explains. "For the time being there is no money to develop the supplementary work—casting, forging, etc. The foundry was set up here about 1890; the largest castings in the country are made here. Soon there will be no one to do it.... For the time being we cannot deal with any more trouble. Last year we were no longer exporting in the fourth quarter and since domestic orders stagnated also our stockpiles suddenly increased. In such a situation it would be a great help if the stockpiling enterprises would really stockpile. We should not have to deal with every little batch.

"We are not out of the crisis yet. I feel that 1981 is the real madir. We are used to having in hand, by the beginning of the year, orders for at least the first quarter and we can organize production on this basis. We calculated the optimal series and grouped manufacture. This is how we worked for years. And now? If there is a fraction of it we have to do it. This makes necessary frequent tool changes and even then the machines are not fully utilized.... In addition, if there is an order it is still not certain that we will deliver the product and not just increase our stockpiles. In August, for example, we were able to deliver only 32,000 of the planned 40,000 tons; for the rest there was either a transportation problem or we could not solve the method of payment (letters of credit) in time."

Awaiting Improvement

The depressed prices for capitalist export led to price reductions for a few products domestically also.

"It may happen," the director general said, "that the enterprise has no interest in expanding capitalist export while the people's economy does. Then the decision is out of the enterprise sphere of authority. In the present crisis every detail of our work is under a magnifying glass. It turned out that it was useful to centralize maintenance and employ those working here 'as a side line' in machine manufacture. The decision affected about 5,000 people and, naturally, not everyone was happy about it. But we calculated that with ad hoc machine manufacture we could develop a profile with which we could reduce somewhat our sensitivity to the crisis. How long will the present nadir last? I am no profit but I can guess: The situation will not get worse than it is now. In the future we will make as much steel as we are making now, maybe more.... So we are counting on a minimal improvement."

[24 Sep 81 p 7]

[Text] Reduced Production at Ozd-Regrouping and Wage Modification

Domestic ferrous metallurgy has gotten into a difficult situation. The crisis which could be felt for years in West Europe did not spare the domestic manufacturers either. How do those affected see the situation which has developed? In yesterday's article we sought an enswer to this question at the Lemin Metallurgical Works. In today's article we will deal with the situation of the Ozd Metallurgical Plants.

About 50,000 people live in Ozd today. A good third of them work in the Ozd Hetallurgical Plants (OKU). So when metallurgy gets into a difficult situation the problems of the city multiply. And when better times come for steel manufacture everything goes more easily at Ozd. The present crisis has affected those in Ozd as it has in other plants.

"This is not entirely true," corrects Dr Jossef Almassy, economic director. "There is not a recession everywhere in the country. For example, if we look at last year's Hungarian crude iron production we find manufacture increasing by 50,000 tons. We can count on an increase of almost 70,000 tons even for crude steel. The drop can be experienced in rolled finished goods. But even here there are differences. Here at home there is greater need for sheet than last year so the Danube Iron Works could increase its production. Manufacture did not decrease for us everywhere either. Nevertheless, I can safely say, we got into the most disadvantageous situation. With the creation of the Dunaujvaros and Diosgyor steel works the earlier steel shortage here at home ended and so the two giants are not buying from us this year. This year we will be manufacturing less than last year by more than 100,000 tons for both crude iron and crude steel.

"As a result of the developmental policy of the 1950's we make only rolled finished goods at Ozd. Our products are demanding of raw material and energy and every price change hits us. Elsewhere they can protect themselves by increasing processing but we have no such possibility. We have neither forging plant nor foundry. In a boom this is not a disadvantage but in a crisis we are very much at a disadvantage...."

Proven Pessinism

I really found the situation of metallurgy in Ozd to be difficult. So it was surprising that despite every difficulty they "saved" for this year 200 million of last year's profit of almost 500 million. So—in contrast to the situation in Diosgyor—they will not operate at a loss according to present calculations. It is true that they expanded the steel works here in 1978; they expanded the rolling works even earlier so no entirely new development burdens the enterprise. But, after the older investments, they must still pay back an indebtedness of more than three billion. So the relatively good results must be explained by something else.

"The metallurgical crisis was not unexpected. Recognizing our indebtedness and insufficient resources we saw early that we had to do something different than

before. Taking the 'market oriented' slogan seriously, we could not manufacture according to the earlier pattern. Up to now maximal utilization or overburdening of capacity counted as a merit. If we did this we would go bankrupt. So last year, already, we cut back production; for a time we shut down the fine wire line and one of the large furnaces. We did not manufacture for the warehouse. We calculated that financing stockpiles and overstepping the reserve level could cost more than not producing. Unfortunately, life proved us right; the situation has only worsened since last year. So reduced production continues. We think that we have attained the freedom of movement to undertake some immediate delivery also."

At the end of last year about 250 workers were transferred from one plant to another. This year already 1,000-1,500 have been shifted for a shorter or longer time and 250 workers have been employed at different jobs for several months. According to the economic director this still accords with the tolerance of the people. What is essential is that work and the earlier pay be ensured. But it is part of the full picture that it is not easy to find a job in Osd or around the city. It is a one-time thing for this many people. So the tolerance is necessarily greater than customery....

Staying on One's Feet

When it became evident that the reorganizations in themselves would achieve little they modified the wage system also. Earlier one could get, in addition to the base wage, a sliding wage depending on quantitative performance; now quality and material and emergy use take the place of quantity. More than one billion forints were being spent every year on maintenance. This year the allotment was reduced by 120 million forints, which could be achieved by better organization and increasing their own work. (Even now many outside enterprises are involved in maintenance.) They are counting on another 110 million from material and energy savings....

It is a wonder what the human mind is capable of if one gets into trouble and wants to prove oneself. Because this is what those in Ozd want now. To prove at any price that they can stay on their feet even in a more difficult situation. At least for a while....

"For how long? I do not know. The market is incalculable. Our prices are lower by about 20 percent as compared to the 1980 prices. But it is also true that those of last year—especially in the first half of the year—were sharply and unjustifiably high. There was a lot of buying; many calculated that prices would go up this year. Perhaps speculation produced the great demand?! It is difficult to say, so it is not easy to see the end of the crisis either. In any case one version of our sixth five-year plan counts on a prolongation of the crisis. In that case we will only satisfy domestic needs and fulfill socialist inter-state contracts. Realistically, however, we are counting on being able to maintain the 1981 production in the future also. And after a few indispensable developments perhaps we will be able to expand the production scale also. But these are only plans; for the time being we can hardly squeeze out the money for maintenance of level investments. This has to be solved first; otherwise our equipment will deteriorate badly...."

Predictions

A number of enterprises have gotten into a difficult situation with the crisis. If the valid regulator system were implemented for them they would go bankrupt. The present regulators were prepared for the "normal" course of economic life; there is no separate regulation for crisis situations. But there should be; the example of the two enterprises reported on shows this. If the foreign market situation is bad it appears more national to operate capacity at a lower level of exploitation. The present regulators make this possible to only a limited extent. So if the crisis continues ad hoc judgments will become necessary. If not, then the conditions for loan repayment must be modified in some cases also....

When will the crisis end? This question concerns many experts today. It is hard to say. It is not simply a question of when some sort of vitality will begin in economic life as a whole which will then have a vitalizing effect on steel manufacture. One must also consider how the production of the wastern European countries will develop and whether there will be supports to encourage modernization, and with what effect. Even if there is a substantial reduction in material and energy use as a result of modernization Hunganizatumetallurgy, with its technical level and product structure, will be able to compete only in a few areas. So much depends on how Hungarian metallurgy makes use of the present crisis. Will it improve the organization and quality of work? Semething is on the move at the Lenin Metallurgical Works and it appears that the first results can be seen at the Ozd Metallurgical Plants also. But this is only the beginning; much depends on its being continued. On whether the rationalization which has begun continues or gets bogged down at the present level. Because in that case one cannot predict much of a future for domestic metallurgy.

8984

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DRAFT PLAN, BUDGET FOR 1982 PUBLISHED

Warsaw ZYCIE WARSZAWY in Polish 19 Sep 81 p 2

[Text] (Own information) On the 17th of this month, a draft plan and budget for 1982 were presented at a conference with the government's press spokesmen. Vice-premier Zbigniew Madej informed reporters that the Cabinet had accepted a resolution regarding the principles for working out a plan and budget for next year and also examined the preliminary proposals presented.

There hangs, above all, a shadow of uncertainty over the general outline of these documents. For this reason, it was decided that both the draft plan and budget would be analyzed from the point of view of several variants: apprehension, hope and the middle variant—the most realistic one. Coal is the pillar which decides what turn the course of economic events will take.

If the present situation persists, then we may count on a pessimistic variant. This would mean 155 million tons of coal for next year and at the same time a further decline by 10 percent in industrial production and as compared to the period before the crisis—by 30 percent with a subsequent drop in the national income by 7-10 percent, diminished export and the fatal collapse of all segments of the market resulting in the necessity for the widespread introduction of ration—cards.

However, because—as stated by Vice-premier Madej—action is being undertaken to increase mining, the optimistic variant envisages 175 million tons of coal, volunteer work on the part of miners will be required on free Saturdays for two incomplete shifts. The 20 million ton difference in coal creates a ray of hope since it makes it possible to increase industrial production by 5 percent in relation to the current year, makes it possible to increase export by 7-10 percent and the national income correspondingly by 2-3 percent. Consequently, this means a decided improvement in supplies on the market, activation of the economy and reaching a production level of from before the crisis in a matter of 3 years.

In the midst of these categories is the most realistic variant. Here, everything depends, mainly, on coal; although, these types of variants were accepted in respect to all other factors which lack certainty.

The importance of coal in replenishing our economy with the inflow of foreignexchange currency was also noted. It is known that exports have diminished, thus, creating specific payments consequences. There is less foreign-exchange currency flowing in from capitalist countries since export has diminished from 26 million tons in 1979 to 8 million tons curing the current year. In addition, the twofold decrease of coal exports to socialist countries places our economy in a difficult payment situation towards our neighbors. For 1981, we did obtain all deliveries in the amount that was theoretically established, even though, we have not fulfilled our assumed obligations. It is difficult to predict whether socialist countries and the Soviet Union in particular will went to give our economy credit in the same way next year. Thus, variants are indispensable for this reason, as well. It is the same with agriculture. If this year's harvest yield were to again repeat itself-it would signify a solution to the problem of supplying our market with food commodities, with the exception of meat which would still need regulating because three years are needed to rebuild the animal stock upon which the elimination of ration-cards is conditioned because the economy cannot afford to import meat. Nevertheless, 5.5 million tons of grain will have to be imported for 1981-1982 while for this year, procurement is expected to be 4 million tons, therefore, smaller than the import.

What seems to be relatively rigid in all the variants, are the most essential expenditures for education, health—therefore, expenditures for society's basic needs. This differs, however, from crisis effects in other countries where these areas are first to fall victim whereas in our country, such expenditures are even increased.

Vice-premier Zbigniew Madej declared himself in favor of the more optimistic variants and also informed about the kinds of planning innovations to be introduced, particularly since next year marks the start of economic reform.

Minister Marian Krzek presented the preliminary budget estimate. Although, as throughout this year, provisional measures will be used during the first few months of 1982, nevertheless, some sort of a guage is necessary. This year's budget will close with a 200 billion sloty deficit. With the variant of apprehension; i.e. with the continuation of the current falling trend, the budget deficit would increase to 800 billion slotys. This would mean that the deficit would reach one-half of the budget value. This is not a very pleasant prospect because the balancing out of the difference by means of issuing cash and bank notes would pose a burden on all of us. However, the realistic variant disposes towards attaining a budget deficit of one-third of the budget.

Tendencies of protecting basic social interests also find expression in the budget. However, positions which are the most rigid are those which need to be secured for the improvement of the educational system and for increasing of aid grants and retirement plan payments.

Many of Minister Krzak's comments were devoted to the economic reform which represents a phase of new life for finances. For enterprises, this will be a very difficult period because today, in over half of the economic units, the obtained effects from production activity are lower than the costs incurred. The building industry is particularly unprofitable. To be sure, a healing period is expected. However, very soon it will be considerably more difficult to obtain credit for the financing of revolving funds. Of vital significance will be the bringing into reality of the sloty exchange rate in relation to exchange currencies, elimination

of the notion of a foreign-exchange sloty and the introduction of conversion factors.

The general tendency of financial policy will be towards boasting monetary cost. Therefore, it is necessary to raise the price of acquiring money by way of raising the bank rate and creating more favorable conditions for enterprises to place their funds in banks. The minister of finance also announced, among other things, the revalorization of savings deposits.

This information was supplemented by data presented by the vice-minister of mining and power, Jersy Halary, on the mining of coal, on the problems of financing work done on free Saturdays and also on protests by "Solidarity", in certain mines, against the last government resolution which introduces favorable principles of remuneration to the miners as well as a system of retirement. Examples were given of mines where the employees were demending, by way of a referendum, the regulating of these matters in such a way as is the case in the government resolution; however, "Solidarity" began protesting in these seme mines. It is also bringing out charges of blackmail of the mining crews. These new conflicts must bring about concern, especially since, despite the increasing of employment in mining by 12 thousand persons from the beginning of the year, despite improvement in the supply of replacement parts and extending the mined face, the mined yield has dropped on working days as well. After 8 months of the current year, the average mined yield on working days, therefore, Monday through Friday, amounts to not quite 606 thousand tons. In August it decreased to not quite 582 thousand tons whereas the present technical production capacity of the mines is 630 tons per 24-hour day. Whether the pessimistic version or the one of hope will, in practice, make its mark on the scenario of our lives in the coming year depends to a significant degree on the fulfilling of these capacities and on the maintaining of good work by the miners.

9853

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SPECIAL CURRENCY EXCHANGE RATES PUBLISHED

Warsaw ZYCIE WARSZAWY in Polish 13 Oct 81 p 2

[Text]

Polish National Bank

Warsaw 13 October 1981

Excerpt From Foreign Exchange Rate Table No 18/81 Special Currency Exchange Rates in Zlotys

Country	Foreign Currency	Foreign Exchange and Honey		
		Purchase	Sale	Average
Australia	1 Australian Dollar	38.84	40.42	39.63
Austria	100 Schillings	214.13	222.87	218.50
Belgium	100 France	89.32	92.96	91.14
Denmark	100 Kroner	466.38	485.42	475.90
Finland	100 Harkkas	762.68	793.82	778.25
France	100 France	600.22	624.72	612.47
Greece	100 Drachmas*	60.13	62.59	61.36
Spain	100 Pesetas	35.45	36.89	36.17
Bolland	100 Floring	1,355.04	1,410.34	1,382.69
Japan	100 Yen	14.67	15.27	14.97
Yugoslavia	100 Diners*	88.61	92.23	90.42
Canada	1 Dollar	28.09	29.23	28.66
Lebanon	100 Pounds	759.25	790.23	774.74
Luxenburg	100 France	89.32	92.96	91.14
Horway	100 Kroner	577.08	600.64	588.86
Portugal	100 Escudos*	53.03	55.19	54.11
Federal Republic of				
Germany	100 Marks	1,500.89	1,562.15	1,531.52
United States	1 Dollar	33.67	35.05	34.36
Switzerland	100 France	1,769.91	1,842.15	1,806.03
Sweden	100 Korner	612.23	637.21	624.72
Turkey	100 Pounds*	33.53	34.89	34.21
Great Britain	1 Pound	62.37	64.91	63.64
Ital;	100 Lire*	2.83	2.95	2.89

^{*}In purchase of currency from below listed countries the following exchange rates are used:

Greece	100 Drachmas	54.38
Yugoslavia	100 Dinare	74.70
Portugal	100 Recudos	51.28
Turkey	100 Pounds	30.68
Italy	100 Lira	2.59

Special currency exchange rates are used in settlement of accounts for current transactions.

Basic Currency Exchange Rates With a Surcharge in Zlotys

Country	Foreign Currency	Foreign Exchange and Honey		
		Purchase	Sale	Average
Albania	100 Leks	181.84	183.66	182.75
Bulgaria	100 Leva	2,618.66	2,644.98	2,631.82
Czechoelovakia	100 Koruny	211.24	213.36	212.30
People's Republic of				
Korea	100 Won	1,057.19	1,067.81	1,062.50
Cuba	100 Pesos	1,730.05	1,747.43	1,738.74
People's Republic of				
Mongolia	100 Tugriks	459.41	464.03	461.72
German Democratic				
Republic	100 Marks	720.13	727.37	723.75
Romania	100 Lei	215.42	217.58	216.50
Hungary	100 Forints	156,23	157.81	157.02
Vietnam	100 Donas	1,000.28	1,010.34	1,005,31
USSR	100 Rubles	2,304.42	2,327.58	2,316.00

Basic currency exchange rates with a surcharge are used for non-trade payments. For travellers checks purchased in rubles from the Foreign Trade Bank of the USSE, and payable outside the USSE in the currency of the country where used, the exchange rate of 4,819.07 slotys for 100 rubles will be used. Exchange rate table No 19/81 dated 5 October 1981 is no longer valid.

Exchange rate tables are available for view at all branches of the Polish Mational Bank.

CSO: 2600/35

ORGANIZATION, DEVELOPMENT OF PRIVATE AGRICULTURE DISCUSSED

Warsaw WIES WSPOLCZESNA in Polish No 6, Jun 81 pp 33-40

[Article by Blazej Wierzbowski: "Policy-Organization-Law and the Development of Private Agriculture*"]

[Text] In economic considerations on the subject of controlling agriculture, the importance of the organizational factor is generally recognized, but it means that the importance of the legal factor is not always given the proper weight. In the considerations thus far on the relationship between policy and the law in controlling agriculture, A. Stelmachowski's proposal is striking. He proposed the following model in relation to management of the land:

- a) On the "top floor" there should be a set of directives of a political nature (in of themselves having no legal character), transmitted in the form of a program accepted by the organs of authority or state administration;
- b) these directives and programs should be translated into a language of planned standards (tasks) that are properly concretized;
- c) finally, there should be a set of legal instruments of an application-execution nature in relation to the planned standards, operating by orders and prohibitions or stimuli (incentives) and authorizations.

This model may be applied not only to the management of farm lands. It may also be applied in controlling all of private agriculture. The remainder of this article is devoted to a comparison of this model with the present theory and practice of controlling private agriculture.

Farm Policy Programs as a Source of Information for Private Farmers

The private farmer has a dual role in the control procress, for he is both the controlled and the controller. All kinds of information is sent to him from different levels of the controlling system, intended to produce a behavior that will correspond to the preferences of the controlling center. The private farmer takes this information and considers it to a greater or lesser degree in making concrete decisions. One of these sources of information are the farm policy programs.

^{*} This article is a modified version of a paper delivered at the annual session of the Polish Society of Political Sciences in Radom, November 27-29, 1980.

Because of past history, of which the generation of private farmers that is still occupationally active was a part, the information contained in the farm policy programs is very important to private farmers. It must be remembered that the farmers' past history is comprised not only of experience that was favorable for private agriculture during the period of farm reform and reconstruction (1944-1948)2, but also the experience that was much less favorable-the collectivization policy period (1948-1956). We hazard to say that his period left lasting impressions in the political and occupational consciousness of the private farmers, in the form of prejudice against such forms of farm management as farming production cooperatives on the one hand, and on the other hand--doubts about the permanence of private management in Polish agriculture. It seems also that these impressions were not obliterated by the experiences from the next period, which can be called a period of differentiated methods of controlling agriculture (1956-1970). It is true that during this period the application of drastic means of administrative pressure on private agriculture was discontinued, but at the same time the ability to develop private farms was reduced. This was done by regulations making it impossible to enlarge the private farms and by depriving them of access to modern means of production.4

Finally, the period of concentrating and modernizing agriculture (from 1971). Although it brought a series of positive changes, insofar as policy regarding private agriculture is concerned, it did not bring about a lasting conviction that private agriculture is a permanent element of our farming system. The reasons for this should be sought in maintaining the glaring disproportion between outlays for socialized agriculture and outlays for private agriculture.

No one has to be convinced that a clear and readable declaration embodied in farm policy programs must be very meaningful to a private farmer. The absence of such a declaration must breed uncertainty and reflect unfavorably on production activity. In making important investments, the farmer considers his decision from a long-range viewpoint, a decision covering several decades in the future. That is why political programs should as precisely as possible define the place of private agriculture in our agricultural system. They should also clearly specify policy goals and methods relating to private agriculture. Past programs of farm policy did not always answer this requirement. Frequent changes were made in methods and resources, changes that were not always justified by economic necessities and capabilities. Only the basic formulations of fare policy goals remain unalterable. It should be noted, however, that they are quite general. Three main goals of farm policy are involved. They are: growth of farm production, gradual transformation of agriculture on socialist principles, and assurance of an improvement in the standard of living of the population employed in agriculture. Such formulations permit different interpretations of issues that are very important to private agriculture. This interpretation is not always favorable. We will speak of this in the next part of the article.

From the political center's viewpoint, such a procedure appears to be justified. It was difficult to consistently implement the strategic goals of farm policy, since too often there were shortages of specific food items on the market, which was the source of serious political and social tensions. This was probably due to the undue partiality toward the socialized sector in agriculture. Because it was possibly to exert influence directly on this sector, interventionist deliveries to the market could be assured.

Such a procedure could not help but weaken the confidence of the farmers in farm policy as it related to the private sector. As a result, the information contained in the farm policy programs did not always produce the decisions preferred by the controlling center.

Socialization of Agriculture as a Key Concept of Farm Policy

Undoubtedly one of the most important concepts of farm policy is the concept "social-ization of agriculture". This concept has long been treated in an officially legal manner, without observing its economic substance. Socialization of agriculture was understood to mean, and is still so understood, a change in ownership relations.

Frequently even in the 1970's a sense of impatience was apparent in farm policy, in the striving to increase the land areas in the socialized sector as quickly as possible. This could not help but affect the decisions made by the private farmers.

We believe that more attention now should be given to the economic substance of the concept "socialization of agriculture". A typical example here is the cooperative movement. It substance here is clearly dependent upon the kind of socioeconomic system in which it functions. It is the same with private farming. We cannot limit ourselves simply to official-legal definitions and regard as socialized that which a certain rule of law regards as socialized. Consideration must also be given to the degree to which the specific formation existing in agriculture is able to bring a systematically perceptible improvement in feeding the community, which is, of course, in accord with the basic goal of a socialist economy. If the degree of socialization of private and state farms or cooperatives is judged from this standpoin then this assessment would not entirely have to be unfavorable to private farms.

With socialized industry, trade, transportation and credit, the private sector can be closely connected with the entire socialized economy in such a way that the goal of the private farm is in agreement with the societywide goal. This is most apparent where people's attitudes are concerned. It is paradoxical that it is easier to persuade a private farmer to do work that is socially desirable in terms of quantity and quality, than to persuade a worker on a state farm. In the first case, the amount and quality of work has a direct effect on the private farmer's income. In the second case, however, it is extremely difficult to arrive at a proper relationship between the amount and quality of the services rendered and the amount of the remuneration.

Nor can transformations in the farming system be treated in an official-legal way. By farming system we mean not only the system of ownership relations in agriculture. This concept is made up also of organizational-legal forms of farm production and economic relations between the town and the village. If the farming system is so understood, then the questions remains from which of the elements making up the farming system should its reconstruction begin.

The past history of Polish agriculture as well as the present economic situation compels us to think about a change in ownership relations as the last and rather distant stage in the socialization of agriculture. We should, however, give our undivided attention to improving the system of economic relations between the town

and the village, if only because the socialized sector receives from the private economy over 95 percent of the commodities produced. This high degree of commodityproduction socialization is due simply to the fact that the socialized economy is a monopoly. The degree of this socialization is incommensurably high in relation to the activity of the socialized institutions formed to influence the size and structure of production on the peasant farms. The legal institution which is fundamental in this field, namely the contractual agreements between the farmers and the government to supply farm products, has been reduced to a purely commercial operation.9 Not until the socialized economic units guarantee the farners supplies of means of production and share with them the production risks can there be any talk about actual possibilities of socializing the commodity ties between private agriculture and the national economy. This form of private farming socialization meets with no resistance on the part of private farmers. On the contrary, I will hazard the statement that the farmers are waiting for it. But the socialized economy is not yet ready for this. It does not have the necessary amounts of production resources and the appropriate organizational solutions. That is why the concept of socializing the commodity ties meets and will probably continue to meet strong resistance from the organizational units of the socialized economy. Nor should the possibility of the appearance of stipulations of an ideological nature be ignored. 10

If the political center intends to become more effective in controlling private agriculture, it must clearly define in the farm policy programs the concept of farm system reconstruction that it is accepting. Any ambiguity or evasion on this question may bring about unfavorable political and economic results.

Coordinating the Growth in Farm Production with the Socialization of Agriculture

One of the extremely difficult tasks of farm policy, particularly in the 1970's, turned out to be the reconciliation of the two basic goals of this policy: growth in farm production and socialization of agriculture. The concept that an indispensable precondition for the socialization of agriculture is that private farming must first be strengthened from the technical and economic standpoint, was an unquestionable achievement of farm policy in the early 1970's. 11 But already in the mid-1970's there was no consistency in the implementation of this concept. This was revealed in the improper policy of disposing of State Land Fund lands and of creating artificial strategies in the form of group farms in agricultural circle cooperatives. In this case there was no mechanism for translating the strategic goals of farm policy into a language of specific activities at the gmina level. In the absence of a clear interpretation of the term "socialization of agriculture", negatives effects had to result. It appears that in the future the coordination of the growth of farm production with the socialization of agriculture should be the task primarily of the central level. At the basic level, the goal of the operations of the system which controls agriculture should simply be a growth in farm production. I

During the last period, an attempt was made with the help of the local administrative organs to artificially accelerate such processes as specialization and coproduction in private agriculture. This led to inordinate discrimination in favor of a narrow group of private farms, which could hardly be called progress in socializing agriculture. In the case of private farm groups, a number of errors were made and inconsistencies permitted, which is the reason that this form of horizontal coproduction in agriculture is becoming less and less popular. It turned out also that the system of artificial priorities that was formed was not timed with supply capabilities.

The question of timing the growth of farm production with the socialization of agriculture constantly requires better solutions. The economists should have the deciding vote in this matter. It is the duty of the political representative to take care that the growth in farm production not give rise to exploitation of man by man. Impatience and artificial acceleration of the process of socializing agriculture on the part of the political and administrative element produces, as the experience of the 1970's showed, results opposite of those intended.

Desired Changes in the Organization of the Private Agricultural Control System

During the 1970's the list of farm policy instruments was greatly increased, but no important change was made in the construction of the system for controlling private agriculture. Depite the appearance of the "food economy complex" concept, the division into a Ministry of Agriculture and a food and procurement industry remains. This is a division which is maintained consistently from top to bottom. At the peak it is revealed by the existence of two ministers, and at the lowest level, by the failure of the food industry units to fulfill the function of integrator of production by private farms and by blocking their access to intermediary institutions. 15

Units of socialized farming have been made part of the private agriculture controlling system. We refer here mainly to the combines, which on the one hand obtained the right to enter into contracts for delivery of farm products, and on the other hand were committed to render services to private agriculture. All units of the socialized farming economy can co-produce with the private farmers. But the lack of appropriate legal instruments and economic incentives has meant that the potential of controlling private agriculture by means of socialized units of the farming economy has not been fully utilized. 16

The reform of local organs of state administration placed some important tasks before the local organs of state administration on the basic level. The organs of voivodship rank also received a number of tasks. These tasks are quite precisely specified in the binding legal instruments. But the powers to which these organs are entitled have not been precisely defined. Furthermore, the local administrative organs do not have the resources commensurate with the tasks assigned to them. The disparity between the tasks and the resources is especially glaring in the case of local state administration organs on the basic level.

The process of controlling private agriculture could be greatly improved if there was a genuine farming self-government. To put it simply, instead of constructing a mechanism for transmitting tasks to the individual private farms, the specific tasks could be transmitted to the elements of the farming self-government, who in turn would be responsible for assigning these tasks to the farms, taking into account the specific conditions of a given area. But these tasks would have to coincide with the interests of the farmers as a whole, and proposals, rather than decisions, would have to be made. That is why including genuine farming self-government in the private agriculture control system can make it inconvenient for the control center, and also for the political center, insofar as control on a current basis is concerned. However, it can be very useful insofar as achievement of tactical and strategic goals is concerned. Organizational solutions introduced in the first half of the 1970's definitely diminished the standing of farming self-government. Changes

also occurred in the farming cooperative movement which weakened the standing of the cooperative self-government. This was done by integrating three sections of the farming cooperative movement and bestowing upon them the features typical of state economic organizations. As a result, the farming cooperatives could not be an effective element for controlling private agriculture, since the signals received from the private farmers did not influence the decisions made by the individual cooperatives. Similarly to other units of the socialized economy, they lost their independence due to the extreme centralization of the management of the national economy.

Use of social policy instruments to control private agriculture meant that organizational units of the Ministry of Labor, Wages and Social Affairs became part of the private agriculture control system. The Social Security Agency, which is very active in interpreting the law on pensions, plays a special role here. The consequence of this is that the voivodship heads refer matters on pensions to the departments of employment and social affairs, despite the fact that these matters frequently involve turnovers of farm real estate.

It is apparent that the system for controlling private agriculture is constantly expanding. However, it does not form a uniform organizational system. As a result, even if there were a mechanism for translating political goals into a language of concrete tasks evolving from the plans, there would be no one to whom to assign these tasks.

Comments on the Subject of a Mechanism for Planning the Development of Private Agriculture

It was pointed out earlier that the mechanism of translating farm policy goals into planned tasks for the particular units that control private agriculture was and is very imperfect. The causes of this are: imprecise establis/ment of the relationships among the farm policy goals and poor structure of the controlling system. The inadequacies of planning itself should also be mentioned. The neglect in territorial planning is very acute. The removal of this planning from socioeconomic planning is, in the case of agriculture, the cause of the improper utilization of farm areas. 18

The negative effects of excessive centralization in planning have also been felt. An example is the program for specialization of private farms. Realistic capabilities were frequently ignored in planning and implementing this program and, instead, indicators assigned from above were the guiding element. As a result, neither the specialized farms nor the nonspecialized farms had enough production resources.

The official-legal understanding of the concept "socialization of agriculture" made itself known in the field of land policy in translating goals into tasks for local organs of state administration. As a consequence, private agriculture was, for all practical purposes, deprived of the opportunity to obtain land from the State Land Fund. It is true that the land management program was revised in 1977, but it is quite interesting that the Council of Ministers resolution which introduced it was not repealed.

The absence of a precise mechanism for translating farm policy goals into planned tasks may, in practice, also lead to actions on the lowest control levels, where tactical goals, i.e., long-term goals, are made into operational goals, or short-term goals, which means that decisions are made hastily, without proper consideration and preparation.

Legal Instruments of Farm Policy

The legal instrumentation of farm policy also evokes critical comments. The process of improving the legal instruments of farm policy began very promisingly in the 1970's. Shortly after the events of December, the renewal of legal means for farm policy was provided for by passing a set of farm laws in October, 1971. Farm policy assumptions were elevated to the rank of constitutional provisions when the constitution was amended in 1976. The law granting pensions and other benefits to farmers and their families, passed in 1977, was also very important.

However, farm law still does not constitute a uniform and lucid system. 19 The standards of farm law are not always an appropriately efficient instrument in controlling private agriculture. First of all, the laws passed in the 1960's and applied to the old policy relating to private agriculture, need to be repealed. 20 In controlling private agriculture, farm law should make less use of orders and prohibitions and more use of stimuli (economic incentives). A good example of this is the pension law, which, despite the fact that it contains a number of inadequacies, greatly hastened the process of transferring farms to heirs by means of an incentive in the form of retirement pensions.

More use should be made of existing legal institutions without unnecessarily complicating the system of farm law. An example of this may be the institution of contracting. It may be an effective means of control if appropriate organizational solutions are worked out and there are sufficient quantities of production resources available for private agriculture. But instead of improving contracting conditions, rules on coproduction and specialization were introduced into farm law. These regulations were changed several times. In the face of a constant shortage of production resources, these regulations improved the situation only slightly. Furthermore, it is extremely difficult to base any kind of farmers' organization laws on them. They may be regarded as instructions to state administration organs and units of the socialized economy. The legal weapon, which the rules on coproduction and specialization give to the private farmer, is of very questionable quality.

Such excessive casuistry should be avoided in farm law. It may produce results that are in conflict with the goals of farm policy. An example here may be certain regulations on farm inheritance.²²

In controlling private agriculture it is extremely important that legal regulations to a larger degree relate to such farm elements as capital, labor and organization. Most legal regulations now pertain directly to the land. In connection with this, a thorough analysis and revision of existing legal-financial questions should be made. Land tax has definitely ceased to be an effective instrument for controlling private agriculture.

Legal solutions do not give enough consideration to the fact that the private farm has a family character. The circumstances of the farmer's family members who work on the private farm, is not always clear. Some regulations on farmers' social security contain provisions which are unfair to members of the farmer's family who render services on the farm. This vague or badly structured legal circumstance for family members working on private farms may be the cause of the very high migration of rural youth. Farm law problems must remain under the influence of farm

policy. It seems that the insufficient regard for the family character of a private farm may stem from a certain ambiguity and vagueness surrounding the concept of "family farm" in farm policy. 25

Problems in farm law have also appeared in coordinating such goals of farm policy as farm production growth and socialization of agriculture. An example here is the pension law which probably only by the force of momentum ended up with legal solutions containing unwarranted privileges for farmers transferring their farms to the state. 26

Final Comments

The above considerations lead to the conclusion that the relationships among the farm policy, the organization of the system controlling private agriculture, and farm law, are forming improperly. The absence of a mechanism for translating political goals into a language of concrete, planned tasks is responsible for the fact that the political element, in addition to performing an inspirational, programming and control function, is forced, in controlling private agriculture, to take a series of actions of a purely operational nature. That is why farm policy programs should be improved so as to unequivocally embody the issues that are important to private agriculture. Above all, the question of socializing agriculture should be covered unequivocally, for it is not a matter of indifference to private farmers as to whether this socialization will take place through changes in ownership relations or through commodity relations.

It seems that a change in the approach to socializing agriculture, in addition to its pragmatic advantages, would also have political advantages. It would assist in restoring the confidence of the private farmers in farm policy, and returning to the political agent his proper role in controlling private agriculture.

In recognizing private farms as a permanent element in Polish agriculture, it is necessary to improve the mechanism of the division of outlays for agriculture, both in the sector system and in the territorial system. The lawful and organizational institutionalization of this mechanism is very desirable. The question of the size of these outlays and their assortment composition is extremely important. This depends, however, on what kind of concept of further socioeconomic development of agriculture is accepted, including such matters as the position on peasant-worker farms, mechanization of small and average farms, etc.

The food economy complex, proclaimed in politics and science, should attain an organizational structure in which the ties between private agriculture and the food industry or socialized units of the farm economy are closer.

Before future problems pertaining to private agriculture can be solved, more careful attention must be given to the relationships among policy, organization and law. These matters have already been appropriately dealt with in the deliberations and resolution of the United Peasant Party's Eighth Congress. They now must be concretized in the form of legal actions and organizational measures.

POOTNOTES

- A. Stelmachowski: "Legal Instruments of Policy Towards Agriculture and Their Effect on Changes in Agrarian Structure," in: "Przemiany strukturalne w rolnictwie polskim," [Structural Transformations in Polish Agriculture], Warsaw, 1979, pp 65-66.
- The division of Polish farm policy into stages is taken from A. Stelmachowski and B. Zdziennicki: "Prawo rolne," [Farm Law], Warsaw, 1980, p 47.
- 3. Compare R. Manteuffel: "Przyszlosc rolnictwa," [The Future of Agriculture], Warsaw, 1980, p 47.
- 4. Compare A. Stelmachowski and B. Zdziennicki: op. cit., pp 58-60.
- 5. From this standpoint, the results of studies conducted in a village environment by the Institute of Basic Marxism-Leninism Problems in 1979, are interesting. Although it is true that farm policy was judged to be very favorable or favorable by over 75 percent of the people surveyed, and 55 percent of the village dwellers were in favor of expanding private farms, nevertheless 48 percent of the people surveyed foresee the dominance of socialized agriculture in 20 years, with a predominance of state farm enterprises. See Z. Sufin: "The Attitudes of the Village Population Towards Economic and Social Transformations in the Village," in: "Spoleczne przemiany na wsi i w rolnictwie polskim", [Social Transformations in the Village and in Polish Agriculture], Warsaw, 1979, pp 169-172.
- 6. This seems to be how the concept is understood by A. Czyz in "Ideological-Educational Work in the Village," in: "Polityka rolna i praca partyjna na wsi," [Farm Policy and Party Work in the Village], Materials at the Polish-Bulgarian Seminar, Warsaw, 1979, p 39.
- 7. Compare R. Manteuffel: op. cit., p 28.
- 8. See A. Stelmachowski and B. Zdziennicki: op. cit., p 11.
- Compare J. Lewandowski and A. Stelmachowski: "Economic and Legal Instruments in Controlling the Development of the Farm Economy," in: "Problematyka ekonomicznoprawna rozwoju gospodarczego PRL," [Economic and Legal Problems in Poland's Economic Development], Warsaw, 1976, p 151.
- 10. It is difficult to resist the impression that in controlling private agriculture we are dealing, especially at the lower levels of control, with the primacy of ideology over economics. This is probably a permanent impression left over from the period of accelerated collectivization. During this period, as we know, Stalinist concepts were applied. This historical precedence of Stalinist practice over Leninist in the process of socializing Polish agriculture may be the source of resistance on the part of non-economic elements against the concept of socializing agriculture by means of economic connections between the socialized economy and private agriculture.

- 11. Compare Z. Grochowski: "The Problem of Coordinating Production Growth With Socialist Reconstruction of Agriculture," in: "Spoleczno-ekonomiczne problemy rozwoju wsi i rolnictwa w Polsce," [Socioeconomic Problems in the Development of the Village and Agriculture in Poland], Warsaw, 1978, p 76 and following.
- See M. Urban, "A Voice in the Discussion," in: "Problemy finansowania rolnictwa.
 Materialy konferencji naukowej (18-19 listopada 1976 r.)," [Problems in Financing Agriculture. Materials from a Scientific Conference held November 18-19, 1976], Warsaw, 1977, pp 193-194.
- 13. Compare J. Rajtar: "Changes in Manufacturing Techniques and Structural Changes and Management Efficiency in Agriculture," in: "Ewolucja spoleczno-ekonomicznej struktury polskiego rolnictwa," [Evolution of the Socioeconomic Structure of Polish Agriculture], Warsaw, 1979.
- 14. Compare J. Czyszkowska-Dabrowska: "Causes and Effects of the Dissolution of Peasant Groups," WIES WSPOLCZESNA, No. 10, 1980, pp 46-53.
- 15. Compare B. Zdziennicki: "Kontraktacja produktow rolnych. Funkcje i problemy organizacyjne," [Contracting for Farm Products. Functions and Organizational Problems], Warsaw, 1975, particularly p 51 and following. Large changes have taken place relating to the data contained in this work. New institutions have arisen and new organizational connections have been developed, but the essence of the problem remains the same.
- See D. Sklodowski: "Concept and Practice in Coproduction of Socialized Agriculture with Private Agriculture," WIES WSPOLCZESNA, No 9, 1979, pp 49-57.
- 17. An example here may be land management, where the gmina head, despite important tasks, has no legal or geodesic service available to him. The gmina head's powers here are only window-dressing.
- 18. See A. Stelmachowski and B. Zdziennicki: op. cit., pp 293-297.
- 19. I was able to expand this thought further in the paper, "Farm Law as an Information System. Evaluations and Forecasts for the Legislative Process," delivered at a conference on "The Role of the Law in the Development of the Country's Farm Economy", organized by the Institute for Judicial Law Research and held on May 15-16, 1980. The conference materials are being prepared for publication as a "small printing."
- 20. Examples may be the laws: "The Take-Over by the State of Farm Real Estate for Moneys Past Due," dated June 28, 1962, DZIENNIK USTAW, No 17, 1968, item 130, and "Forced Repurchase of Farm Real Estate," dated January 24, 1968, DZIENNIK USTAW, No 3, item 14, with later changes.
- 21. The possibilities inherent in the contracting agreement were pointed out many times by A. Stelmachowski and B. Zdziennicki. See, for example, the latter: "Zagadnienia prawne kontraktacji," [Legal Problems in Contracting], Warsaw, 1978, p 148 and following.

- 22. Hore on this subject by B. Kordasiewicz: "Dziedziczenie testamentowe gospodarstw rolnych," [Testamentary Inheritance of Farms], Warsaw, 1978.
- 23. In the case of possible settlements between a family member rendering services on a farm and farmer, it is necessary generally to look into the regulations on partnerships or unwarranted aggrandizement. From this standpoint the situation in Italian law is much more clear. A special regulation has been written into the civil code governing situations where family members work on the farm.
- 24. Based on article 26 of the pensions law, a farmer's children who were injured in work on the farm and became group 1 or 2 disabled, are entitled to a disability pension amounting to barely 750 zlotys per month.
- 25. See "Ideological Consultation in the United Peasant Party's Chief Committee," WIES WSPOLCZESNA, No 4, 1978, pp 20-26.
- 26. For example, in accordance with art. 18 of the pensions law, a funeral benefit is authorized in the case of an annuitant or pensioner who transferred his farm to the state. If the farm was deeded to an heir, there is no funeral benefit entitlement. In accordance with art. 19, a person who deeded his farm to an heir will find the annuity to which he is entitled suspended in case of earnings as set forth in the universal pension system. However, if the property has been turned over to the state, the annuity is not suspended regardless of the amount of additional earnings.

9295

CSO: 2600/16

TRANSPORTATION IN 3-YEAR STABILIZATION PROGRAM DESCRIBED

Warsaw PRZEGLAD KOMUNIKACYJNY in Polish No 4, Apr 81 pp 121-123

[Article by Kazimierz Ratajczak: "Transportation in the 3-Year Program of Economic Stabilization"]

[Text] Everyone knows that domestic transport is not adequately prepared to properly handle transportation tasks. There are particular difficulties on the railroads.

The following are among the basic factors which restrict the railroads' transport effectiveness: inadequate technical condition of tracks and the electric locomotive network as well as inadequate technical condition of railroad rolling stock, aspecially freight cars. Employment deficiences and the ageing of personnel in the basic operating groups and repair facilities are not unimportant either.

The basic difficulties in motor transport are well-known and continue to exist despite the undertakings which have been pursued. There is still a lack of spare parts, tires, are in short supply, and there is a shortage of repair station slots. The shortage of drivers and employees in service and repair facilities is getting worse. Therefore, the major goal of transport policy in the years 1981-1983 should be to overcome the above-mentioned difficulties.

The large quantities of freight in previous years have created corresponding priorities for freight transport at the cost of the level of service in passenger transport. An expression of this is to be found in the difficult travelling conditions and the delays in the scheduled trips and flights, which are not on time.

Because of this situation there are substantial social and economic losses resulting especially from the fact that commuting employees are arriving late to work. The 1981-1983 forecast projects a moderate increase in passenger transport, mainly for PKS bus transportation. Undoubtedly a substantial rise in the population's buying power and the rise in the number of work holidays will increase somewhat the population's demand for transport services.

On the railroads the basic targets are focused on restoring the rate and expanding the scope of railway line electrification, substantial upgrading of the technical condition of railway tracks, and improving the functioning and increasing to the maximum the capacity of the service and repair facilities of the railroads.

In order to provide for proper locomotive service it is necessary to step up (in 1981-1983) operations to expand the rate and scope of the electrification of railway lines. This is justified above all by our own energy base, the relatively well-developed domestic electric railway car industry; the more favorable prices on electric vehicles, and the lower energy intensiveness per unit transport work, that is, per tonkilometer.

In comparison to diesel vehicles, electric vehicles also enjoy more favorable technical-operation parameters. Here it is mainly a matter of simpler construction design (the absence of generators and diesel engines), the greater power and overload capacity of drive motors, the longer operating period, and the greater reliability in operation. Alongside this, electric locomotives have very little adverse influence on the environment.

From 1956 to 1980, because of the use of electric traction on the Polish State Railroads a total of more than 70 million tons of hard coal was saved (calculated in terms of conventional fuel), which at 1978 prices exceeds 50 billion zlotys and greatly exceeds the outlays incurred for electrification of railroad lines during this period.

In 1976-1980 we expected to install electricity to convert 2,100 kilometers of railroad lines. In 1976 400 kilometers were converted. Beginning in 1977 the electrification rate clearly slowed down, and from 1976 to 1980 only 1,280 kilometers were converted. The length of the lines converted to electricity by the end of 1980 totalled 6,868 kilometers, that is, 28.2 percent of the network of the Polish State Railroads, PKP.

Hence a basic issue is the absolute restoration of the electrification rate already achieved, that is, 400-500 kilometers of railroad line per year. In 1981-1983 the electrification program should include, for example, lines such as Lublin-Dorehusk, Tlusses-Bialystok, Wroclaw-Glogow-Czerwinsk, Opole -Jelcs-Wroelaw, Grabowno-Krotossyn-Ostrow Wielko-polski, Torun-Inowroclaw, and Zbassynek-Rsepin.

The most important issue in carrying out the envisaged program is for the power industry to step up electric power and for industry to insure deliveries of the means of production and equipment.

Railway line electrification must be accompanied by the installation of an automatic block system to insure that the full operating results are achieved. Complete execution of the railway line electrification program should bring about on the railroads a clear restriction of the rate of development of railroad diesel locomotives, which are becoming less and less economical, owing to the constantly rising price of liquid fuel on world markets.

Arrearages in the repair of tracks (6,000 kilometers of major tracks and 3,500 kilometers of station tracks) resulting from limited deliveries of materials (rail, cross-ties, turnouts) in past years will make it necessary in both 1982 and 1983 to continually change rails on 2,800 kilometers of track, to effect secondary replacement of rails on 1,400 kilometers, to replace 4.8 million cross-ties, and to replace 4,500 turnouts.

The above-mentioned scope of capital repairs to roadbeds will make it necessary to create new capacity in the production of prefabricated cross-ties, turnouts, roadbed accessories, rock materials, and machinery for the mechanisation of trackwork.

Operating considerations, modernization of locomotives, and absolutely necessary withdrawal of wornout rolling stock calls for appropriate deliveries of passenger cars, freight cars, and locomotives. A problem of particular importance is domestic industry's undertaking of the production and delivery of box-cars. Delays in making decisions on this matter may lead to exceptional economic losses. The railroad's situation concerning the number of box-cars it has is critical owing to their level of wear and their operation.

Deliveries of these cars in 1982-1983 should reach 3,00-5,000. Another issue urgently in need of solution is that of deliveries of diesel locomotives for passenger trains and diesel locomotives for switching. The production of switching locomotives located in the engineering industry ministry (formerly Fablok) is too small to meet needs.

A basic condition to upgrading the work of transport industry is the assurance of suitable capacity in the service and repair facilities. The current production capacity of these facilities is not adequate to meet needs for repairs to freight care, diesel engines, and electric units. There are also grave shortages in the production of machinery and equipment for the mechanization of railway trackwork and turnouts and other roadbed materials needed for the repair and maintenance of railway tracks.

In the area of the modernization of the facilities, relatively rapid and immediate effects can be achieved using the "continuous stages" method, given the assumption that in 2-year intervals production or service results will be achieved. In the project designs there will be greater use of light-weight steel designs with prefabricated housing and maximum simplification of installation design. Basically there are no plans to construct new installation surfaces, and the efforts undertaken will be focused mainly on the installation of

production lines (centers), spare parts production, and repairs to assemblies and subassemblies, also with the idea of building a tighter railway technical facilities system, that is, for locomotives and cars. These facilities would repair rolling stock in their own area by replacing these assemblies and subassemblies.

Therefore, in 1981-1983, the following should be done:

Organize and outfit mechanised wheel set repair lines in the ZMTK in Ostrow Wielkopolski, Lupi, Bydgosscz, Gdansk, Gliwice, Stargard, and Wroclaw; car repairs in the ZMTK in Ostrow, Lapi, and Bydgosscz; and bumper repairs in the ZMTK in Ostrow, Lapi, Stargard, Wroclaw, and Gdansk; and equip belts with heavy equipment to straighten car bodies at the ZMTK in Ostrow, Bydgosscz, Lapi, and Gliwice;

Expand the potential in the realm of spare parts production for repair of rolling stock by creating special centers to repair subassemblies and parts for electric locomotives; expand import-substitute production of spare parts, expand by 100 percent the reproduction of spare parts, and expand by 60 percent the production of spare parts for electric locomotives and cars;

Adapt the ZMTK halls in Stargard to set up "Plasser" tamping mechine production under license and complete the further expansion of potential for the production of crushed-stone cleaning mechines, stone crushers, roadbed graders, snowplows, WML5 operating cars, and so on (setting up installation of "Plasser" tamping mechines on license is anticipated to occur at the end of 1981);

Expand the KZN in Biezanow in the area of production of turnouts and finish the adaptation of steam locomotive repair halls at the ZMTK in Bydgoszcz to repair heavy diesel locomotives.

The implementation of the above-mentioned directions of immediate action in 1981-1983 should make it possible to improve the extent to which railway rolling stock repair needs are met.

The above immediate actions, however, will not make it possible to meet all rolling stock repair needs by 1983. After 1983 there will still be a shortfall in repairs owing to the rise in the inventory of rolling stock. It is for this reason that during the 1981-1983 period efforts should be undertaken gradually to expand the potential of the rolling stock repair plants (ZNTKs), so that in later years it will be possible fully to meet the needs for repairs to dissel locometives, freight cars, 3000-volt electric units, and electric locometives. To this end it is necessary to begin the adaptation of the steam-locometive roundhous at the Pila ZNTK, the further modernization of the ZNTK in Newy Sacs, and adaptation and modernization at the Wroclaw ZNTK, along with expansion and modernization of the four-axle car repair halls in the ZNTK in Getrow Wielkopolski and Lapi, expansion of the ZNTK in Hinsk Hazowiecki, and

adaptation of the ZNTK in Olesnics. An equally important condition is the creation of full employment stability for the rolling stock repair plants at a level adequate to carry out the production-repairs programs.

Stability is foreseen for the transport of freight carried by PKS through a change in the structure of freight handled and by reducing the distance freight is transported.

The attainment of improvement in the technical condition of trucks and in the effectiveness of its use is a basic problem with PKS.

It should be emphasized that the current structure of the fleet of busses and trucks has not been adapted to today's transport needs. The bus fleet lacks large-capacity vehicles, and the deliveries of trucks show a shortage of delivery vehicles and medium-size vehicles. In 1982-1983 deliveries to PKS should approximate 8,000 buses and about 8,000 trucks. There are no plans for deliveries of Jelcs 080 buses owing to the fact that they are not very useful in public transportation.

Normal operation of motor vehicles in 1981-1983 will require, among other things, deliveries of 350,000 new tires and 120,000 retread tires, 74,000 storage batteries per year, and a full assortment of deliveries of spare parts.

Prom 1976 to 1980 grave arrearages occurred in the expansion of PES' technical and operating facilities and in adapting its distribution to the changing needs for transportation in the various regions.

In order to ease the current difficulties with PKS' technical facilities it is essential to continue the investments already begun and to begin essential social investments (overnight lodging).

In 1981-1983 the plan is to begin construction on seven lodging facilities, four of which should be completed by the end of 1983.

Inland navigation will carry out major transport tasks on the Odra. It is therefore necessary to continue the modernization of locks and weirs on the Upper Odra. Construction of dams will continue on the Upper Vistula.

The main task in the realm of the state roads is to continue modernizing roads and adapting further sections to carry 10-ton/axle pressure. It is also essential to achieve progress on the network of local roads by adapting them to increased tasks in the realm of service for PKS transportation and agriculture. In this connection the means allocated for minor modernization investments should be directed to the development of highway engineering and the activation of its mechanization.

During the next 3 years the construction of high-speed highways will not be continued. Parts of one-way highways circumventing certain towns in order to eliminate the most burdensome routes through towns will be the only projects to be completed and these only in exceptional cases. Nor are projects foreseen for the construction of large bridge crossings or under- and overpasses.

In air transportation it will be essential in 1981-1983 to begin the replacement of worn-out aircraft in international traffic as well as on domestic routes. In order to upgrade passenger service the Warsaw-Okecie International Airport should be modernized (by expanding the passenger departure zone) and the LOT complex should have construction on it completed in Warsaw. Airport facilities in Gdansk, Wroclaw, Rzeszow, and Krakow should be completed to the extent absolutely necessary. Work in the realm of equipping ground facilities for civil aviation with modern control equipment and air traffic cafety facilities should also be consistently continued.

A change in transport rates, especially for freight, should represent an integral part of the economic reform. New freight rates were to have been introduced back on 1 January 1980, but these decisions have been overturned for the present. A rise in freight rates is essential in 1981-1983, owing to the need to improve the carriers' financial position and the need to increase the economic influence on users in sheir selection of the proper means of transportation.

10790

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LONG-RANGE DEVELOPMENT OF TRANSPORTATION OUTLINED

Warsaw PRZEGLAD KOMUNIKACYJNY in Polish No 4, Apr 81 pp 146-152

[Article; "From the Work of Sejm Commissions: Vehicle Heeds of the Transportation Industry"]

[Text] One of the conditions for restoring our country's economic balance is the assurance of the effective working of the entire transport system. A basic factor in the transportation industry's technical base, one which determines the level of transport capacity and the effectiveness of the national transport system, is the quantitative and technical level of the vehicles owned.

The condition and long-range prospects for providing for vehicles for the transport industry were the subject of deputies' deliberations at a joint session of the Commission on Beavy Industry, Engineering Industry, and Metallurgy and the Transportation and Communications Commission, which was held on 26 February of this year.

In attendance at the meetings were representatives of the ministries involved, that is, the industry of heavy machinery and farm machines, with Minister Stanislaw Wylupek; the engineering industry, with Minister Henryk Gawronski; and the communications industry, with Deputy Minister Janusz Kaminski.

As the information which the Ministry of Transportation presented to the deputies shows, during the next few years an important problem will be the need to replace rapidly a large number of vehicles owing to substantial wear and a generally indequate technical level. There will be a rise in needs related to the need to create reserves of cars, which is related to the deterioration in the external conditions of transport industry work as the result of the introduction of more work holidays and the uneven transport patterns resulting therefrom.

As the result of changes in the directions of economic development, there will be a decline in the demand for vehicles needed in investment services (open railroad cars and dump trucks) and an increase in other types of vehicles (bed trucks, box cars, and specialized cars).

Alongside the need to upgrade vehicle durability and reliability, to increase load capacity, to adapt freight cars better to automatic loading and unloading systems, and to expand locomotive power and increase their operating parameters, the issues of reducing energy intensiveness and increasing the level of automation, passenger traffic safety, and travelling comfort become prominent.

A basic issue for motor vehicles, alongside design and production, is the introduction of designs which are less energy intensive and provision for better load parameters of vehicles.

The major issue in air transportation is the urgent need to obtain aircraft with greater operating economy, speed, and travelling comfort.

Rail Transport in 1981-1985

The draft of the national socioeconomic plan for 1981 calls for 450 million tons of freight to be carried by standard-gauge railways. Most of the increase will consist of freight previously carried by motor transport, which the railroads will have to assume owing to the need to save on liquid fuels.

It is anticipated that the national economy will gradually shift from the current recession, and by the end of this 5-year period this will mean increases in the production of material goods to level not below those of previous years. This will be expressed in a rise in the demand for railway shipments, which preliminary assessments estimate at about 500 million tons of freight by 1985.

Previous tendencies allow us to project that passenger transport will remain at basically the same levels and approximate 1.1 billion passengers. The maintenance of this transport volume will depend to a great extent on travelling conditions which the railroads will be able to insure to passengers.

For narrow-gauge railroads traffic on a level of 9.6 million tons freight this year and about 9 million tons in 1985 is the projection, and passenger transport is expected to carry 8 million and 6 million persons, respectively.

Current Vehicle Condition

Frieght Cars

The structure of freight cars as of the end of 1979 was as follows: 16.3 percent covered cars, 57.7 percent coal cars, 11 percent flatcars, and 15 percent other.

What attracts our attention is the small proportion of covered cars, which is constantly decreasing in terms of the number of cars and their

load capacity, as the result of a decline in deliveries from about 3,000 cars in 1971 to about 1,000 cars in 1977, and the suppression of deliveries since 1978 and inventory cancellations.

There will be a far greater demand for transport by covered cars, owing to the economy's turn to market production and the related organizational changes needed in transport service, that is, the railroads' assumption of certain transport tasks previously handled by motor transport.

The situation in freight car management will be made more difficult by the large number of cars which are technically unfit, a figure which rose to 36,500 cars in 1980.

A particularly important problem which has gone without a proper solution for many years is the inadequate reserve supply of freight cars. The work of railroad transport features oscillations in flow, not just over the course of the year or quarter but also according to the day of the week. To fully cover the uneven distribution over various days of the week, for example, it is necessary to have what are called temporary reserves, which should amount to 3.5 percent of the working level. This is implied by the need to maintain an even flow of loading of mass cargo in Silesia and other regions, and also the need to insure continuity in loading operations in the event of traffic problems.

Independent of the above reserves the railroads should have what we call constant reserves to meet additional transport needs resulting from seasonal increases in the transport of farm crops, furnace coal, the increased market deliveries of foreign trade, expanded shipping from the seaports, and the greater departure of PEP cars with foreign destinations. The size of constant reserves is estimated at about 10,000 cars, including 6,000 coal cars and 2,500 covered cars. The favorable changes in the inventory of cars for passenger traffic which have taken place in the past few years, although they have been slow, have been accompanied by a gradual improvement in the basic technical parameters of rolling stock. Even now about 98 percent of the cars have ball bearings, and about 85 percent have electric heating. The most outmoded wood-body cars, which represented about 30 percent of all cars in 1970, were withdrawn from use in 1976. As the result of deliveries of new cars and the elimination of outmoded rolling stock, the average age of passenger cars has declined during the past 10 years by about half and is presently about 15 years. The number of cars over 30 years old presently represents less than 10 percent of all cars.

At the same time, as the conversion to electric and diesel power advances on the PKP system, the number of cars in electric locomotive units has increased. Up until 1975 there was also a rise in the number of diesel cars (beginning in 1976 deliveries of diesel cars were discontinued, and by the end of 1979 the number of these cars had declined by 15 percent, as the result of removing from stock the cars which had worn out).

One of the indices which describe travelling conditions is the number of passengers per inventory place. The calculations show that in 1975 there were 1,439 passengers in Poland per inventory space in domestic passenger transport, but in 1980 this figure was 1,320 persons. It is true that this shows some improvement, but the travelling conditions still cannot be considered satisfactory.

The number of passenger cars in the PKP inventory is still inadequate, and this causes great tensions, particularly during the peak periods of passenger transport. In 1981 these difficulties will become worse as the result of the introduction of a larger number of free Saturdays and the limitations on bus transportation, particularly long-distance transport.

Locomotives

A feature characteristic of the changes in the structure of locomotive vehicles since about the middle of the 1950's has been the gradual elimination of steam locomotives and their replacement by diesel and electric locomotives. The rate and directions of these changes were the result of the electrification of the PKP lines and the rate of delivery of modern locomotives from domestic production and import.

The rise in the proportion of electric locomotives in transport was particularly rapid during the decade between 1960 and 1970. During this period this phenomenon was related to the rate of electrification and domestic industry's commencement of serial production of EU07 electric locomotives and EM57 electric locomotive units. The later decline in the growth rate of work accomplished using electric locomotives, particularly during the latter half of the 1970's, was the result of the decline in the rate at which PKP lines were converted to electricity, for example, in connection with the concentration of investments and units executed for the construction of the Steel-Sulfur Line [LHS].

The basic development of diesel traction on the PKP goes back to the first half of the 1960's and is related to the commencement in this country of serial production of SM42 switching locomotives and import deliveries of substantial numbers of ST43 and ST44 diesel locomotives. From this time the further development of diesel traction ran evenly.

After the year 1970 deliveries of new locomotives and the withdrawal of worn-out locomotives (mainly steam engines) helped to bring about further improvement in the structure of locomotive stock, which in 1979 could be broken down as follows: 26.2 percent steam, 29.5 percent electric, and 44.3 percent diesel.

During the past 5 years (1976-1980) passenger traffic needs stemming from the timetables have been fully met by locomotives. On the other hand, because of the lack of reserves, in freight transport there have been periodic difficulties and tensions in complete, punctual train service. To ease these difficulties the transportation ministry undertook efforts

of an organizational nature. For example, for electric and dissel locomotives on many lines the principle of using the same locometive for a train all along the same route was introduced. Priority was given to hiring employees for locomotive units. Changes were introduced in the realm of sections of train locomotive service, and so on.

The Demand for the Delivery of New Rolling Stock and Locomotives

The rise in transport demands in 1981-1985 and the need to make transportation more reliable require the assurance of adequate deliveries of new rolling stock which is entirely effective.

Polish State Railroads

Freight Cars

Preight car deliveries in 1981-1985 should make it possible to replace worn-out cars which qualify for withdrawal from the inventory, to achieve an increase in loading capacity in keeping with the rise in transport demand, and to create the essential operating reserves.

In order to use the railroads during the next few years to carry the load presented here at the outset, it will be necessary to expand the inventory of cars by about 26,000 freight ears. To make up for the decline resulting from wear and withdrawals from inventory estimated at about 50,000 cars during this period in the preliminary estimates (minly old types of cars with small load capacities), it is necessary to deliver more than 28,000 cars. It will be necessary to deliver another 11,000 cars to create the reserves needed to maintain even work flow.

Hence, total freight car deliveries between 1981 and 1985 should approximate 65,000 cars, including 8,500 covered cars, 30,000 coal cars, 12,000 platforms, and 7,500 dump-cars.

Considering the fact that freight car deliveries in 1981 total only 6,400s cars, including 3,500 coal cars, 1,000 platforms, and 300 self-dumping cars, the mean annual deliveries of these cars in coming years should be greatly increased.

As the result of the failure to accomplish the necessary deliveries of freight cars, the work of railway transportation will feature a shortage of adequate reserves, which may have a very adverse effect on the execution of transport tasks, and in an extreme case it may hamper the country's development. The acceleration of deliveries of covered cars is already essential at the present time.

The transportation ministry, among other things, is making efforts to accelerate deliveries of cars to carry grain, of four-axle covered borcars and two-axle cars, and of six-axle platform cars. The issue of the rapid mobilization of production of covered cars, the shortage of which is being keenly felt, is particularly important.

Passenger Cars

In order to improve travel conditions, as has been demanded, it will be necessary in 1981-1985 to provide deliveries of passenger cars designated both for the replacement of cars (it has been estimated that inventory withdrawals during this period will total about 1,700 passenger cars, including 1,500 cars to carry travellers) and for the creation of the reserves essential to ease difficulties during periods peak passenger traffic.

Current forecasts concerning deliveries of new rolling stock give a total of about 1,800 passenger cars from domestic industry and imports. Hence, this will be slightly more than cars removed, which will contribute to improvement in travel conditions. There is also the projection of a larger number of passenger cars in electric locomotive units. withdrawal of an estimated 12 electric units, that is, 36 cars for carrying passengers, and 20 motorized cars from the inventory is anticipated for the years 1981-1985. It is expected that during this same period there will be deliveries of about 350 electric locomotive units, that is, about 1,050 cars, which will provide for an increase of about 1,000 cars for carrying passengers, and this growth will help improve urban and suburban transportation. In addition, there are talks going on concerning deliveries of rail buses and trailer cars from Czechoelovakia to serve lowtraffic sections of passenger routes where other forms of service do not prove economical. Adequate decisions have not yet been made on this subject.

Locomotives

The continuation of the program for the electrification of railroad lines and the anticipated rise in transport tasks will require a larger number of electric vehicles, about 950 more electric locomotives by 1985.

Considering the fact that a total of 140 electric locomotives are to be delivered this year, according to the projections, the deliveries in the later years will have to be correspondingly expanded.

The current fuel and energy situation in the country is making it necessary to cut back some on the program to develop diesel locomotives on the PKP, and the factor which influence the size of the deliveries of diesel locomotives.

State Motor Transport

Transportation Demand

It is anticipated that between 1981 and 1985 the demand for freight to be carried by PKS will show far slower dynamics than the rate of the past five-year period. It is projected that this demand will run around 225 million tons this year and reach 240 million tons in 1985. The assumption of a relatively slow transport growth rate is justified in part by PKP's

cancellation of restrictions, by the decline in interregional motor transport as the result of more rational fuel management, and the limitation on investment activity.

To a greater extent the public icarrier will satisfy industry's transport needs and will successively assume centralized service of the plants of the industrial ministries, that is, the engineering industry, heavy machinery and farm machine industry, light industry, and chemical industry. The structure of PKS freight transport will strive to expand transportation of small parcels (largely performed through expanded regular freight transportation over intermediate—range distances), to expand the transportation of surface truckload shipping in connection with planned interregional transport and the transport of freight in what is called general—use track service, and in the container transport service (KST). Service to the factories of industrial ministries which do not participate in sector transportation, seaports, and river ports will also be expanded. On the other hand there will be a decline in the share of bulk goods, particularly building materials which have previously been transported by dumptrucks.

In passenger traffic a rise is projected which will increase transport from a forecast of 2.35 billion passengers this year to 2.66 billion in 1985. These sizes take into account the expansion of general-access transportation, including local and intervoivodship transportation, in those regions where there is not a dense network of railway lines. They also take into account provision to handle commuting school children and to take over this transportation previously furnished by various institutions, as well as the development of social, everyday, and touristic transport and the maintenance of the previous level of employee transport.

It is anticipated that between 1981 and 1985 the growth rate of passenger transportation will be far greater than that registered in 1975-1980. This notion is justified by the fact that during the current five-year period the transport needs were not fully met.

Current State of Motor Vehicles

Trucks

At the end of 1980 the number of trucks was swer 1,800 trucks lower than the number specified in the plan for 1975-1980. The greatest shortfall in deliveries was found in the medium-capacity hox truck group.

There are also shortages in the specialized vehicles. The motor vehicle structure with regard to capacity, specialization, and make differs from the targets of the plan too.

At the present time PKS is using 11 makes of truck, and this covers 60 types. It is true that for the efficient transportation of various sorts of freight it is essential to have vehicles of varying capacities with the appropriate special types of chassis, but others needs do not justify such a wide range of diversity. This diversity increases the costs of

stocking spare parts and places a decided burden on the technical facilities.

Given the minor changes in the structure of domestic production of trucks, there is the possibility of meeting public transport needs, providing that the quality of vehicles produced is upgraded. The durability of many assemblies and subassemblies of motor vehicles is far lower than corresponding classes of imported vehicles. Detailed research on the durability of individual parts and assemblies has shown their range to be 250-400 percent below that of motor vehicles like the Zil, for example.

Busses

There is an acute shortage of busses with a large number of places in the interurban versions and the suburban versions. The quality of the Autosan make of domestically produced busses is still unsatisfactory. The runs of these busses are 150-200 percent those of the Jelcz busses. The weakest element in the Autosan is the engine. The quality of the chassis has been improved.

The busses we have been importing for the past few years from Yugo-slavia (they currently represent 13.4 percent of our fleet, in all its versions) have been providing a high level of reliability in suburban transport and a relatively good travelling standard in long-range transportation.

Demand for the Delivery of New Vehicles

Trucks

A change in transport structure requires the adaptation of the transport potential. The rate of vehicle deliveries in 1981-1985 should be higher than in 1975-1980 for box trucks, but the share of deliveries of self-dumping vehicles should be consistently reduced.

It is expected that deliveries of domestic trucks will be limited to the Jelcz and Star. We will discourage imports of general-use vehicles as well as increases in imports of specialized vehicles. It is necessary to insure the production and delivery of intermediate-capacity vehicles (Star 200) with freight boxes which are higher and longer, adapted to carry .bulky . freight. Deliveries of trailers should be assured so that there will be enough to reach a level representing 50 percent of the motor vehicles. He great demand for small-capacity self-dumping vehicles is foreseen.

The total size of demand for truck deliveries in 1981-1985 has been specified at 26,150, including 22,350 box trucks and 3,800 self-dumping trucks. The deliveries will mean 19,560 to supplement the truck fleet after the withdrawal of worn-out vehicles (15,760 box trucks and 3,800 self-dumping trucks).

Busses

The need to satisfy qualitative and quantitative transport needs better requires that the increase in the number of busses exceed the increase in transport. These should be busses with greater capacities. The minimum increase in busses should average 2.6 percent per year. By 1985 the share of busses with many places (more than 50) should exceed 55 percent of the deliveries to PKS.

Needs in the realm of bus deliveries are estimated at 22,000 busses. This includes 18,400 busses needed to make up for fleet declines resulting during this period as the result of withdrawal from inventory.

It is the transportation ministry's opinion that the domestically-produced vehicles should first of all be directed to meet the needs of the public carrier, that is, PKS. A similar principle should be in effect in the distribution of liquid fuels.

Inland Navigation

All the indications are that in keeping with its designation inland navigation is gradually returning to serve shipping on distant routes and limiting local shipping, which of course means a decline in the total shipping sizes expressed in tons.

Initial assessments show that this tendency will be also maintained in the immediate future. Assuming that inland navigation shipping increases from 6 to 9 percent per year, in 1985 it can reach a level of 23-24 million tons.

It is estimated that there will be a more rapid increase in long-distance shipping: 7-10 percent for coal, 6-8 percent for ores, 8-10 percent for phosphorous raw materials and chemical fertilizers, and 10-15 percent for grain. This is causing an acceleration in the increase in shipping, and as a result there is going to be a greater demand for the fleet, especially covered barges and motor barges.

The general technical condition of the fleet in operation in inland navigation is not satisfactory. A decisive factor here is the age of the fleet, its very intensive operation, and backlogs in making repairs. The repair difficulties are caused mainly by delays and shortages in the deliveries of spare parts and materials.

The basic tonnage unit in shipping freight in inland navigation consists of pushed barges. On the Vistula barges of up to 400 tons are used, and on the Odra mostly those of 500 tons are used.

Of the total number of pushed barges which the shipping enterprises own, about 40 percent are already worn out because of intensive operation under difficult navigating conditions. The mean age of barges is 10-12 years (while the depreciation rate is 15 years). These barges, owing to their

technical condition, are being consistently withdrawn from use and 'designated for withdrawal.

The 500-ton motor barges (BM500) were designed at the end of the 1950's. Under the technical and operating conditions which existed at that time, they were considered modern and provided adequate social conditions.

The production of motor barges ended in 1970. Owing to their age and navigating conditions, a substantial proportion of them have already worn out, and it is for this reason that in 1981-1985 about one-third of them will be withdrawn. The program for the modernization of inland navigation fleet projects that beginning in 1981 the production of new 500- and 600-ton motor barges will begin and that these barges will gradually replace the worn out 186500 motor barges.

The motor barges will correspond to the current technical and operating demands. In particular, the crew's working conditions will be improved.

The first Tur and Zubr pushers were built in the 1960's. In 1981-1985, owing to the extent of wear and age, it is essential that 50 of these pushers be withdrawn from operation. In place of them, to get back up to the current transport capacity level, the inland shipbuilders should build 50 pushers of the Koziorozec and Bison type.

In 1981-1985, owing to age and the extent of wear (20-40 *years), all towed barges will be withdrawn from operation. A substantial number (more than 50 percent) of the tugboats will also be withdrawn. Up until their elimination in 1986-1990 the rest will be used for portswitching work in river ports.

Inland navigation presently has 32 passenger ships with a joint carrying capacity of 4,434 places. In 1981-1985, in keeping with the targets in effect, 20 SP-150 ships should be withdrawn from operation.

The documentation on SPRI-85 ships is presently being drawn up. The prototype may go into operation in 1982. During the next few years it is anticipated that series production will begin in two shippards.

During the period that the old ships are being replaced by new units (this means practically throughout the whole five-year period), we should count on a shortage of spaces in inland passenger transport.

Altogether, deliveries of newly constructed craft for the fleet during the next five years should total the following for all the shipping enterprises (for the recreation of the fleet and to meet new transport tasks): 36 motor barges, 110 pushers, 342 pushed barges, and five passenger ships.

Deliveries of unpowered barges should have a brankform with at least 20 percent covered barges (to provide for the transportation of cargoes like grain, fodder, phosphorous raw materials, and fertilizers) and specialized barges to transport motor vehicles.

The group of inland ship repairwards under the Inland Mavigation Industrial Association is the producer of the fleet to serve the needs of the inland navigation enterprises. In order to satisfy basic ship needs it will be necessary to bring about appropriate expansion of production potential, increase funds to import certain equipment, and insure deliveries from cooperating ministries.

LOT Polish Air Lines

It is projected that passenger transport on LOT will increase during the next five-year period from 1,875,000 in 1980 to about 3,105,000 in 1985. During the same period freight traffic should increase from 17,500 tons in 1980 to about 43,400 tons in 1985.

The total transport capacity which the enterprise will have at its disposal in 1981 will meet transport needs in the quantitative dimension. In terms of any technical quality assessment, the structure of the aircraft available is adequate for the network in operation. Long-range aircraft predominate in foreign traffic, but this use is not justified by transport service needs. This fact has negative results, not only in terms of transport sizes but also in terms of costs. During the next few years, up until new intermediate-range aircraft are put into operation, this structure will become worse.

Alongside the problems related to the features of the aircraft themselves, we must remember that overall problems of material supply also influence operating effectiveness. Here it is largely a question of the fuel supply.

Limited modernization of the fleet during the next five-year period is to be achieved by replacing the TU-134 with the TU-134A and the IL-62 with the IL-62H (greater confort, lower fuel consumption).

In terms of aircraft quality, some improvement will take place on certain lines after the introduction of the IL-86. Owing to this aircraft's very great capacity, it will only be operated on a limited number of soutes.

Container Transport System

Currently the demand for transport in large containers under the auspices of the PSK organization is estimated at about 1.2 million tons.

The maximum transport capacity in KST at the land facilities of the ports, because of the PSK operating container points, is about 800,000 tons, as the result of the current maximum reception capacity of the container points and stations.

It is anticipated that land container transport will increase in 1981 to 1 million tons and in 1985 to 1.5 million tons of cargo.

Currently the PSK inventory has 2,675 1C one-door general-purpose containers. To carry out the tasks specified for the current year the existing number would be adequate. For technical reasons the actual number of containers in operation within the country, in domestic traffic, is about 2,000, which makes it difficult to carry out the planned tasks, given the uneven distribution of the cargo.

The reduced number of containers in operation is the result of the need to set about 500 containers aside for repairs and withdraw or lease about 200 containers.

The quality of the containers is directly related to the technical condition, which is presently unsatisfactory.

The projected demand for the new container deliveries is about 4,500 lC general-purpose containers. The projected increase in the number of containers will make it possible to expand the services rendered and upgrade the quality of service (for example, allocate a certain proportion of the containers to transport foodstuffs).

The effective use of the containers will be tied in to the modernization of the rest of the components of the transport chain, such as the container points and stations, loading equipment, and vehicles to carry the containers.

At present domestic industry has stopped producing 1C containers and is producing 1CC general-purpose containers for export. As the organizer of domestic transport and land transport in international traffic, including the CDMA countries within the framework of joint use container agreements, PKS is interested in buying 1C containers as standard units used in CDMA.

Nonetheless, the main containers directed to the domestic market are those rejected by PRS or those only having plant quality control, which disqualifies them in public transport.

The shortage of container deliveries or the failure to carry them out in full will cause a reduction in domestic transportation and a decline in the quality of service rendered, increased transport damage, and therefore a rise in damages paid, the necessity of leasing foreign containers, and so on.

As can be seen from the opinions of the deputies on the Heavy Machinery and Farm Machine Commission, based on direct visits which the group of deputies made to the rolling stock industry plants, it will be extremely difficult to insure that the vehicles the PEP needs are delivered, and the task will require special care and organizational efforts. Contributing factors are the difficult material supply situation surrounding the materials essential in the production of the vehicles, the weak coproduction relationships, and many other factors which the plants

themselves and sometimes even the industrial associations are unable to eliminate at times.

The railroad vehicles production program which the TASEO Association has drawn up for 1981-1985 is an important departure from the time-table, number, and types of vehicles which the transportation ministry needs. What is particularly distressing is the difference between the demand expressed by the Ministry of Transportation and the current capabilities industry has to construct railroad vehicles for the PEP, which needs diesel locomotives for route work and for switching and freight cars.

The possibilities are no better in the automotive industry. After becoming familiar with the production targets and capacities of the major railway vehicle producers in the country, the deputies found substantial differences between Ministry of Transportation requirements and the production program of the plants under the POLMO Association.

The inadequate quality of motor vehicles, trucks and cars, and the poor durability of parts is the reason for the increased demand for spare parts, a demand which the automotive industry cannot meet. During the past 5 years stoppages caused by the spare parts shortage increased 250 percent in the truck group and 450 percent in the bus group. This means that at PKS everyday more than 1,800 trucks and more than 2,200 busses are out of service, because of the shortage of spare parts.

The automotive industry is not promising to deliver an increasingly wider range of spare parts.

Deliveries of about 30 percent of the items stocked are partial deliveries, and for about 10 percent of the items there are no deliveries at all.

Since the middle of 1978 there have also been more vehicles idle because of the shortage of batteries and tires.

The inadequate quality of the vehicles has secondary effects in the form of increased demand for major repairs and laborious routine repairs.

The deputies found that because of the current condition of the production base, industry cannot insure that the national sconomy will have the necessary number of vehicles to meet transport meds.

In assessing the situation in terms of the cross-section of all branches of transportation, we should say that the extent to which industry meets the vehicle needs of all public carriers does not correspond to the economy's qualitative and quantitative demand for transport services. This situation is creating the danger that transport will limit the process of normalizing economic life and related production growth, if it is not taken

care of in time. One assurance of preventing such a situation is the undertaking of all necessary efforts to insure the deliveries of new vehicles in quantities which will make it possible to carry out transport tasks. In this situation the transport enterprises should be required to make efforts to use as effectively as possible the vehicles which are delivered or are already in use.

10790

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PROBLEMS CAUSED BY NONOBSERVANCE OF FINANCIAL GUIDELINES

Bucharest ERA SOCIALISTA in Romanian No 14, 20 Jul 81 pp 8-11

[Article by Dr Radu Ciurileanu, director general in the Ministry of Finance]

[Text] Firm and efficient promotion of the new economic mechanism in all areas of social-economic activity, a demand powerfully emphasized at the 2d congress of workers councils means as a basic condition respect for the plan and financial discipline. This is of overwhelming importance, since it guarantees the rational management of society's assets and application of a strict savings program. In the end, respect for plan and financial discipline contributes to the consolidation of economic-financial self-management and the self-financing of the socialist units and, at the same time, to an increase in the efficiency of social-economic activity. Generalization and strengthening of worker self-leadership not only has not in any way weakened the need for respect for financial discipline but, on the contrary, assumes and even accentuates it as a condition in the successful organization and leadership of our socialist units in the current stage of development of the Romanian economy. Right now financial discipline no longer can be limited merely to respecting some legal stendards according to which financial-management activity is carried out. Under the conditions of worker self-leadership, up to the end it means satisfying all the requirements which are at the basis for economic and financial activity of the socialist units so that the maximum results are obtained with minimum material and financial efforts.

Today, when the problem more than ever before is being posed of weighing each leu or each gram of material, firm respect for financial discipline exceeds the framework of an administrative obligation; it also is being asserted and must be asserted as a feature of the partylike spirit which must characterize the entire process of managing our socialist assets and as a patriotic duty of each of the country's citizens. It also is appropriate to state that financial discipline and a spirit of order are required in all sectors and areas of activity, at all steps and at all levels without exception. In this area no "reduction" may exist or admitting any subjectivism or arbitrariness based on considerations required by so-cal' id "actual situation," "objective need," specific nature of the activity" or other similar statements, as, unfortunately, some leaders of enterprises still were invoking when explaining the reasons

for which they did not have total respect for financial discipline.

Of course, financial discipline means a number of prior conditions, among which the high responsibility, which all those proposing it must give proof of, is in the forefront, those who propose, order, approve or carry out the decisions which concern either achieving the state's incomes or utilizing material and monetary assets in lei or in hard currency, within the country or outside it. Just as important are the knowledge, understanding and firm application of all the regulations which form the legal framework for financial discipline. Practice has proven that many times the lack of respect for financial discipline has been due to the fact that those called on to provide it or watch over it simply have not known certain legal provisions or have applied them mistakenly, through a nonconforming understanding.

One may assert that more and more socialist units are precisely respecting financial discipline, in the broad meaning of it, seeking to have steady fulfillment of the tasks of physical production and the value of net production, and good-production sold and received and, thus, profit. Among many, many others, one example is the Suceava cellulose and paper combine, which steadily achieved the production-good sold and received. Cumulatively for 5 months, this indicator was exceeded by more than 38 million lei, that is, by 9.4 percent and, as a result, from the beginning of the year until today, the unit continually has had reserves on account, appealing to bank credits less and less. At the same time, in this period, the combine fit into the total and material costs, regularly overfulling the profits plan.

Frofits -- Fully and Steadily Achieved

In the activity of a socialist unit carried out under the conditions of self-leadership, self-management and self-financing, achieving as large profits as possible steadily and in accordance with the plan tasks takes on special importance, since the expenses connected with financing of the national economy and self-financing from the enterprises' own assets cannot be made at the macroeconomic level.

Of course, the guarantee for achieving as large profits as possible is the solidity with which the budgets of incomes and expenses have been worked out. The better the economic-financial indicators written in the budgets of incomes and expenses—in the incomes portion—have been established, the better the certainty exists that in the execution the units will have available assets steadily and will have the ability to pay insured permanently. However, for this, in each unit the budgets of incomes and expenses must be considered as tools of leadership for financial activity, for preserving the enterprises' financial balance throughout the entire year, for insuring solvency, for analyzing and checking economic-financial activity.

At the working meeting of the Romanian Communist Party Central Committee in May 1980, Comrade Nicolae Ceausescu emphasized: "We must understand that the budgets of incomes and expenses are not something formal, but a means through which the leadership of each enterprise and the workers general meeting can take action in order to obtain the maximum economic efficiency, substantial reduction in material and production expenses and substantial increase in net production, profits and profitability in general, and, on this base, to create the necessary resources both for the development fund as well as the consumption fund."

Fulfilling and overfulfilling the provisions for the incomes in the budgets involve taking all measures for fulfilling the tasks for physical production in the quantities and varieties planned, for diversifying and raising the products' quality, for

improving the processing output, for totally covering the tasks for sale of the production with contracts, for precise and timely delivery of the plans for delivery to the domestic and foreign market and so forth.

Of course, the final goal for carrying out the budgets of incomes and expenses is first to insure a permanent state of optimum agreement between incomes and expenses and, second, to achieve a profit at least at the level planned. The economic units continually must have sufficient receipts in order to be able to cope with their financial duties on schedule; however, for this it is necessary for them to carry out a steady production and sales activity, generally a rational and efficient economic-financial activity.

There are more and more enterprises which are obtaining good results in efficiently using the budget of incomes and expenses, ones which nearly daily follow the method for achieving the incomes planned. For example, the Urziceni ferrite enterprise in the first part of this year fulfilled the tasks for production-good, net production, production-good sold and received and profit completely and even with some overfulfilments. In the first quarter of this year, the Copsa Mica nonferrous metals metal-lurgical enterprise recorded overfulfillments for the indicators of production-good, net production, production good sold and received; profits alone were 24.6 percent greater than the plan forecasts. The string of such examples can continue.

However, there are enough national and local enterprises which do not achieve the incomes planned; the reasons lie in failure to contract the entire production, exceeding the material expenses, the manufacturing of poor-quality products and others. The Craiova tractor and agricultural machinery enterprise in the first four months of this year did not achieve the physical production at the planned level or the net production due to exceeding the planned costs by more than 35 million lei; the failure figured at more than 200 million lei for the indicator of production-good sold and received, as a result of building some products not in agreement with the contract provisions. In the end, the volume of profits was nearly 55 million lei less than planned.

Another aspect of the problem also is that some enterprises do not enter into the budget the amount of incomes at the level of possibilities. The Progresul heavy equipment enterprise in Braila did not include the incomes completely from the automobile transport activity in the budget of incomes and expenses for this year; incomes of only 6.8 million lei were forecast for this chapter; however, 7.9 million lei were achieved in the first four months alone. Regarding the profits from this activity, they were established at only 730,000 lei, while nearly 2.7 million lei were achieved in four months.

A conclusion is self-evident; without the steady and complete achievement of incomes, the enterprises cannot be self-financing and cannot respect all their duties to society, to the banks and to the suppliers. In the end, achieving the incomes depends on carrying out physical production, the value of net production and the production-good sold and received, which means actions, measures and systematic initiatives to reach the goal sought.

Expenses According to the Destination and Within the Limits Approv d

This requirement for financial discipline proceeds from the principle in the Law on Finances, according to which the socialist units' own assets as well as any other monetary assets are used only in conformity with the provisions of the single national plan for social-economic development and the budget of incomes and expenses and with respect

for the standards and norms established. The socialist units' organs of collective leadership are responsible for the efficient utilization of the assets entrusted by society as well as their own, for achieving the incomes needed to pay back the monetary assets advanced by society, for depositing the amounts due the state budget or the higher organ, for establishing their own assets, for achieving the currency resources planned as well as for sensibly administering and utilizing all the material and monetary resources to the maximum.

Thus, it is fully justifiable to insist that each enterprise take all measures in order to fit into the planned expenses and to reduce them as emphatically as possible. This involves a big and permanent concern with respecting consumption without affecting the products' quality and having broad-scale use of reusable materials, shortening the duration of the manufacturing cycles, fitting into the salary fund planned, increasing the personnel's qualifications, improving the organization of production and work, increasing labor productivity, reducing the administrative-management expenses and other indirect expenses to what is strictly necessary, eliminating deductions and any uneconomical expenses, such as penalties, strengthening preventive financial checking in arranging the expenses and making the payments.

Insuring self-financing by establishing their own development assets at the enterprise level as well as funds for material incentives expresses the efficiency of applying the principles of the new economic-financial mechanism. The responsibility of the workers collectives in any enterprise is amplified even more in the process of using these resources. Each leu spent must be justified by a sure necessity, any action undertaken must end in appropriate efficiency, with as big a profitability and profit as possible.

Before making any expenses, the person planning it must feel obligated to ask some absolutely obligatory questions in making the decision: whether it is forecast in the plan and is justified with regard to the point in time and its timeliness, whether the entire amount planned is needed or if there is cause to reduce or even give up that expense, how the existing supply is being used, what the "current" stocks are and many other similar questions.

Respect for the requirement that all expenses be made according to the destination and within the limits approved involves an active and responsible contribution from the head of the financial-accounting department or of other jobs with tasks of financial-preventive checking, those who, during the process of examining and judging any expense, give their opinion both of the legality as well as the reality, need and savings nature of it.

Despite the fact that the budget of incomes and incomes creates conditions for the most substantiated possible establishing of expenses, including for strict respect for the destination of the funds during the checks and analyses, cases also have been identified where enough effort has not been made in giving the most exact possible size to the need for funds or various expenses have been made which are contrary to the law and spirit of saving. Along this line of idea, we confine ourselves to placing into discussion several aspects determined during the check on budgetary execution at some county people's councils. At the Botosani County Ristory Museum, there are 1,540 works of art valued at 6.9 million lei which were deposited in a warehouse without appropriate preservation and without being exhibited in 1976. The general directora for agriculture and the food industry in Botosani had at its disposal 1.5 million lei to do jobs to improve some acid and alkaline soils which no longer was being done, although necessary; in exchange, a million lei were transferred to pay the specialists.

At the Brasov county directorate for roads and bridges, there was not permanent respect for specific consumption for the materials provided in the highways with asphalt mixes, thus creating unjustified surpluses which were 432 tons at two stations for filler, which represented 10 percent of total filler consumption for 1980. At the units in the Vaslui County social-cultural sector large funds were spent with less efficiency. It is a case of the school inspectorate, where inventory and teaching material items existed valued at 3.2 million lei which were not distributed to the school units, or the directorate for problems of work and social care, where various items of around 500,000 lei existed, items which were not being utilized appropriately.

From what has been shown we see the need for strict respect for financial discipline when it is a question of arranging or making any expense, regardless of from what funds they are to be made, bearing in mind insuring a savings program which offers the guarantee for utilization of each leu with maximum efficiency.

Elimination and Prevention of Tie-Ups of Capital

Tie-ups of capital are a phenomenon of failure to respect the plan and financial discipline, with consequences for insuring the economic units' self-financing. Actually, tie-ups of capital, both in production activity as well as investment activity, reflect an irrational management of a portion of the socialist assets. We can state without any kind of exaggeration that maintaining the tie-ups of capital is incompatible with worker self-leadership, self-management and the enterprises' self-financing.

As again stressed at the 2d congress of workers councils, the improvement in the leadership and economic-financial planning requires from the workers collectives in the socialist units a high spirit of responsibility in the more and more complex process of administering material and monetary resources so that production is obtained with the planned capital and costs, the level of stocks and of consumption is not exceeded, the manufacturing cycles are given dimensions strictly, while contractual discipline, both for supply and sale, is respected.

Combatting tie-ups of capital means a new way of approach and action, bearing in mind several criteria to which we would like to refer.

The concerns with preventing and eliminating tie-ups must be of a continuous nature and must be systematic, not like a campaign, one of circumstances, as sometimes still occurs, unfortunately. Day-to-day interventions, without interruption, are needed until the eradication of this phenomenon from the activity of some enterprises.

Recently, the organs of the state financial inspectorate of the Ministry of Finance, during a checking and aid action carried out in 43 enterprises belonging to the ministries of machine construction, chemical industry, forestry economy and construction materials and light industry, an action which sought to establish measures to recover the lags in fulfilling the plan indicators and in improving the economic-financial situation of the particular units, discovered that one of the main reasons for the difficulties in insuring the ability to pay, the tie-ups in capital and other assets. Big tie-ups were found at the Craiova enterprise for tractors and agricultural machinery, the Unio enterprise in Satu-Mare, the Nicolina mechanical enterprise in Iasi, the Copsa Mica metallurgical enterprise for nonferrous metals and others.

During the checking, broad actions to utilize the stocks created were organized with the collectives of workers in the particular enterprise and the financial-banking apparatus, succeeding in eliminating tie-ups of more than 600 million lei. At the same time, when it was not possible to efficiently eliminate the tie-ups, graphs and measures for utilization were drawn up for the forthcoming periods for yet another 590 million lei.

It would be interesting to see how many times the problem of prevention and elimination of tie-ups of capital has figured on the "working agenda" of the collective leadership organs of the socialist units. What measures were taken and how was fulfillment of them followed? The concern with combatting tie-ups of capital must be present in all phases of economic activity, from research-design up to the execution process, in the day-to-day work of the worker collectives in the socialist units.

Practice has shown that concerns and responsibilities for preventing and eliminating tie-ups should not be localized only in the financial-accounting department. On the contrary, first, those departments (supply, production, sales, technical and others) are involved in this area which through the activity they carry out cause or may cause these phenomena. Without absolving the financial-accounting department of responsibility but, rather, emphasizing the importance of its activity in combacting tie-ups of capital, it is necessary that, at least equally if not more, the other departments in the socialist units should be mobilized and be responsible as many times as such negative phenomena appear in economic activity.

Given the complexity of causes for tie-ups of capital and the sometimes high degree of difficulty in establishing measures to eliminate and prevent them, it appears clear that only through converging actions and through the union of efforts of specialists in the technical, economic and financial areas can results be obtained in the direction of the goal

The facts show that the tie-ups created in the stocks of material values beyond what is necessary, raw materials and materials are due to some irrational supplies caused, among other reasons, by failure to know the existing stocks efficiently and exactly, by changes in the production tasks and level of consumption standards approved or, simply, due to some mistakes in calculation when establishing the supply need. The financial check carried out by the delegates empowered by the Ministry of Finance, banks and economic ministries has once and for all halted a large volume of unjustified supplies during the first quarter of this year. Thus, an order for 42,000 faucets with valves , valued at 2.1 million lei, was stopped from being endorsed at the enterprise for transport and delivery of petroleum products in Ploiesti, since the quantity requested exceeded the consumption achieved for 1980 and did not take into account the possibilities for reconditioning the used faucets. At the Iasi construction trust there was a refusal to acquire some asbestos cement tubes valued at 1.3 million lei, since the existing stocks and already contracted quantities, with the Bicaz asbestos cement factory covered the need for 1981. At the Craisva industrial central for machinery and electric apparatuses, a contract was reduced 4.6 million lei since the supplier, the Calan Victoria enterprises, had signed up for delivering special cast iron instead of normal cast iron as the beneficiary had ordered. At the Sinaia mine mechanics enterprises, the supply of 800 kg of molybdenum disulphide from the Bihor mining enterprise was stopped from being endorsed since the quantity requested exceeded the need for production.

Avoiding tie-ups in stocks of raw materials and materials, first, is linked with the existence of absolute order in the day-to-day knowledge of the real situation of the

structure and componence of the particular stocks, with permanent collaboration between the various departments in the enterprises so that any change in the plan tasks, in the consumption standards and in the manufacturing technologies are known as effectively as possible, taking into account all this in the process of material-technical supply. At the same time, within the department for supplysales, correct record-keeping of the contracts, orders, deliveries day by day and, in general, correct flow of the particular operations must be a major concern. However, what also is necessary with the same sharpness is the intensification of the action of preventive financial checking called on in the phase of engagement and payment to halt any operation which does not conform with the law or which is inefficient. This means that the persons entrusted with carrying out the preventive checks must know at any point the planned production tasks, the volume and structure of existing stocks, the level of consumption standards and, in general, any other data and elements needed in making value judgments which take place when the person involved is called on, through his signature, to prove or to reject operations connected with the supply process.

The elimination and firm prevention of tie-ups in capits' and decisive move to short-ening the time for the supply process and for production and sales and speeding up the circulation of values in the economy require, under conditions of worker self-leadership, economic-financial self-management, sustained efforts from the workers collectives in all the economic units, more persevering guidance from the holding organs as well as more exacting aid and checking from the financial-banking organs.

8071

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DEVELOPING COUNTRIES SEEN AS MARKET FOR CHEMICAL EQUIPMENT

Bucharest REVISTA ECONOMICA in Romanian No 38, 18 Sep 81 pp 13-14

[Article by Dr Traian Siles and Elens Angelescu]

[Text] In the area of ways to intensively increase exports special attention must be paid to promoting complex exports, which make better use of the raw materials incorporated into the machines and installations and the work involving superior skill (designing, modern technical approaches, organization of the production flow, organizational know-how, technical assistance, service, and so forth) required for the development of a project.

In his report to the 12th Congress of the Romanian Communist Party, Nicolae Ceausecu pointed out that "the significant increase in the efficiency of exports is a chief issue of the next five-year plan. Consequently, it is necessary to limit and eliminate the products that involve a low foreign currency intake and concrease more the input of the goods that make better use of raw materials, energy and materialized labor, specifically in the field of the machine building, metallurgical, chemical, woodworking and light industries. Moreover, steps must be taken for a more thorough survey of trends on the foreign market, the marketing of our products for corresponding prices and the continuous upgrading of the rates of return, ensuring a balanced and equitable trade."

In light of the attention paid, under this five-year plan also, to expand trade and international cooperation with the other developing countries, it is very interesting to survey the dynamics of exchanges of this group of states in world trade for the purpose of singling out the priorities and options formulated.

Developing Market, at a High Level of Competitiveness

This survey points out that because of the precedence given to the chemical and petrochemical industries in the development plans of these countries their imports of equipment for the chemical and petrochemical industries went up more rapidly than the developing countries' total imports of machinery and installations. Reflecting the sustained industrialization efforts made by the developing countries, the imports of these countries in terms of complex chemical and petrochemical equipment during the 1970-1979 period indicated an almost fivefold increase (from \$300 million in 1970 to \$1.446 billion in 1979).

The most rapid rise in imports of chemical and petrochemical equipment occurred in African developing countries (from \$48.5 million in 1970 to \$297.2 million in 1979) at an average annual growth rate of 25.4%. The imports of complex chemical and petrochemical equipment of Asian developing countries went up from \$156.1 million in 1970 to \$884.5 million in 1979, at an average annual growth rate of 24.2%. It must be emphasized that imports of chemical and petrochemical equipment of Asian developing countries account for 61.2% of imports of chemical and petrochemical equipment of all developing countries.

The Latin American countries, because they already had a chemical and petrochemical industrial base, had a less rapid growth rate (13.6%) than the rates in developing countries of Africa and Asia, where imports of chemical and petrochemical equipment went up from \$95.4 million in 1970 to \$265 million in 1979.

It is estimated that in the next decade the dynamics of the demand for chemical and petrochemical equipment will further involve an upper trend, in light of some options of economic policy. Moreover, maintenance and increase in deliveries for these areas involves continuous upgrading of supply in terms of technical and marketing standards.

Worthy of note, in the first place, among the chief causes that will help to increase the developing countries' demand for sophisticated chemical and petrochemical equipment is the ever growing trend for putting to good use, in the domestic industry, the resources of crude and natural gases, a trend that will manifest itself even more vigorously in the ninth decade. These countries will continue to build for themselves new facilities for the production of basic and intermediate chemical and petrochemical items, and for the production of plastics, synthetic fibers, synthetic rubber, and so forth. In this context the main outlet for sophisticated chemical and petrochemical equipment, by 1990, will be that of developing countries in Asia, in light of the large oil resources in the Hiddle East and Far East. The Latin American countries, because they have a relatively more developed chemical and petrochemical industry, will have more modest rates of increase in the production capacity in the branch involved. The African developing countries in this decade will increase their output of petrochemical products and consequently will need corresponding equipment.

Another factor of increase in demand results from the agricultural policy. The growing emphasis that will be placed on agriculture in the 1980s, in most developing countries will necessitate the use of complex equipment for the production of chemical fertilizer; for nitrogen fertilizer the developing countries in Asia will involve, in 1990, about 70% of all production facilities of this group of countries.

On the whole, world demand for chemical and petrochemical equipment imports of developing countries is estimated for 1985 at \$6.4 billion and for 1990, at \$15 billion. Certainly, such a potential makes very attractive and also very keen the competitiveness on the market of developing countries, an important foreign factor, which will have to be constantly taken into consideration by exporters of complete chemical and petrochemical equipment.

The great majority of developing countries that import complex chemical end petrochemical equipment request top technology, that provides high production efficiency, low consumption rates in terms of fuel and raw materials, and does not pollute the environment. Some customers, specifically the African ones, request the following clauses: complete delivery of the installations, from the stage of design to the stage of provision of the required personnel, from the financing of the structures to the training of the local work force, and supervision of the operation of the facilities, possibly also the purchase of products turned out in the units involved.

The competitive companies from the U.S. and the other capitalist countries doing business in the three zones offer high-standard chemical and petrochemical equipment which also has a low specific weight. These companies manage to offer their facilities with short delivery term, at low prices and under credit terms that are advantageous for customers. Moreover, they provide an ample reference list for sophisticated chemical and petrochemical equipment that has already been exported and already has a tradition. Noteworthy is the fact that in the next years there will be some narrowing in the capacity of absorption of chemical and petrochemical equipment for a number of developing countries characterized by a high degree of industrialization (Brazil, Argentina, Mexico, India, and others), while other markets are almost saturated as a result of previous massive imports (Kuwait, Oman, Pakistan, Halaysia, and others).

Factors of Export Strategy

The brief survey of demand provided above indicates that in formulating the strategy to promote exports of Romanian-made complex chemical and petrochemical equipment to developing countries we must take into consideration, in addition to the internal factors such as the domestic potential existing in the area of research and development, design, production and marketing, also a number of very important external factors such as the economic potential of the developing countries and the capacity of absorption of their markets, the competition encountered on these markets, the tradition already acquired by some companies, and so on. The favorable results tied to the actuation of the internal factors and so on. The favorable results tied to the actuation of the internal factors, however, help to overcome some difficulties and drawbacks generated by external factors.

The Romanian institutes for research, design and engineering display constant concern for the formulation of upgraded designs (which meet the requirements on the foreign market), on whose basis it is possible to turn out equipment that is competitive on the foreign market. Special emphasis must further be placed on the processes for standardization of this equipment, shortening of the cycles for preparing the technical offers to maximum 30-40 days, comparable to those of foreign engineering firms, selection, from among domestic technologies, of those with superior technical-economic features for the purpose of presenting these technologies to the international financial bodies, so that they may be recommended to the developing countries concerned. The increased research, designing and engineering potential of our country also advocates taking of measures to enhance the volume of transfer of technology, know-how of exports of designs, drawings and industrial models, documentations, studies, consultation, expertise, granting of technical and specialized assistance, personnel training, service for plant opening, organization and management of projects abroad, and so forth.

In the activity of production, together with the designer, the producer must be involved with reduction of imports for completion, the weight of chemical and petrochemical equipment, by way of cutting consumption rates in terms of raw materials and supplies, for the purpose of bringing this equipment to the level of international technical standards, improvement of finishing, monitoring of the manner in which the Romanian installations operate in the user country, and so on. The rise in the flexibility of the offer for export also requires greater efforts in terms of rapid adaptation of this equipment to the needs (technical characteristics including resistance to conditions of climate and operation, volumes, and so on) of developing countries and ensuring of delivery, aimed at export under conditions of shortest, competitive terms, of maximum 12 months. For the same purpose, there is the need for surveying the relevance of offering for export small-capacity equipment, that is requested by a number of foreign users.

Ample Technical Potential Based on Domestic Resources and World Cooperation

Rapidity in completing the tasks allotted the foreign trade enterprises in this context is an absolutely mandatory paramount requirement. Approval in a unified and final stage of the substantiation documents and elimination of the red tape aspects that still occur in the process of negotiation and conclusion of contracts, of advancement of offers, and other factors will result in greater competitiveness on the foreign market. Because of the unprecedented rise in competition, it is expected that the marketing difficulties will be far greater than those that occurred in the past years. In this context, it is necessary to use, on an ever broader scale, new forms of trade, expansion and diversification of cooperation, and so forth. There is the need for enhancing the activity of representations on foreign markets and also for developing an intensive activity of informing partner countries about our potential, on the occasion of arrangement of shows, through advertisements abroad in the local press, on the radio and television, and so on. The Romanian offers of chemical and petrochemical equipment must be adequately presented and it is recommended that the offers be as close as possible to the levels of competitive firms in terms of price, credit terms and other factors.

A factor in the rise and greater efficiency of Romanian exports of chemical and petrochemical equipment to some developing countries is cooperation in this area of foreign trade enterprises with foreign firms that have gained technical reputation and already are established on the markets involved.

Moreover, it is effective for the Romanian exporter to also cooperate with native firms in developing countries (especially in the case of far-away countries), providing them with high-standard subassemblies with small volume and weight, chiefly encouraging the delivery of the Romanian-made equipment that is already appreciated on the market of developing countries. Noteworthy among these installations are: oil refining plant, facilities for producing phosphatic fertilizers, aspirin, chlorine, carbon black, ammonia, methanol, and so on.

A real opportunity for expanding Romanian export of complex chemical and petrochemical equipment involves participation in international suctions organized by users in developing countries and financed by specialized international and regional bodies, especially those under UN sponsorship. Romania's participation in the auctions that are organized abroad must proceed in the context of greater responsibility of economic ministries, industrial centrals, manufacturing economic units, foreign trade enterprises and research, design and engineering institutes, for the export of equipment that makes best use of domestic research. To this end, the foreign trade

embrprises must expand their relations with firms that hold licenses for modern production technologies and sign with these firms nonexclusive documents, frameworks of cooperation, that ensure access to these technologies for using them in offers for exports.

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REASONS FOR SHORFOCHINGS IN DRILLING PROGRAM

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Article by Ch. Draghici: "Drilling Programs Implemented Completely and on Time"

forty Considerable volumes of drilling operations, separior to those performed in previous years, are required in order to discover new reserves of petraleum and gases and to obtain high yields, and especially to discover and svaluate deposits located at great depths and to place them in production. To achieve this major aim on behalf of the whole economy the productive units have undertaken measures and extensive programs that can increase the volume of drilling by 10 percent and the volume of known geologic reserves of crude oil by 33 percent in 1981 compared with last year. To obtain the increases necessary to carry out the plan for petraleum and gases for this year and for whole five-year plan, it is first necessary to concentrate all efforts on expanding drilling over the greatest possible areas and especially on penetrating the geologic structures in depth by more productive use of the installations and available time in order to increase the drilling speeds.

Vertical and Horisontal Expansion of Brilling Operations

The sustained drilling efforts made in the first half of this year produced noteworthy results throughout the petroleum and gas industry. In total drilling the plan was fulfilled 102.5 percent (See table), requiring over 22,000 meters of above-plan drilling. Bephasis was placed on exploitation drilling (118.5 percent) to secure the output of crude oil from the new walls and to emance the final recovery factor (68) percent). Once favorable conditions were created for reaching areas difficult of access in the second quarter, drilling was focused primarily on goologie research to secure the crude oil output in 1982 and the following years.

Although the plan for depth drilling for the first half of 1961 was not fulfilled (-6 percent), the prospecting and explaitation operations performed (about 50 percent a re than last year) revealed new accumulations as well as inflications of new hydrocarbon resources that look promising for the next few years. Efforts in this direction are being continued on the basis of some priority programs to intensify geologic operations for better knowledge of the potential of every structure from the west to the east of the country, including the areas of Virteju, Bibesti, Stoientia, Palei-Dragam, Mitrofami-Hamm, Unbraresti, Contesti-Hindries etc. The said programs are intended to expedite performance and completion of drilling operations by a more pronounced increase in the drilling rate (about) percent faster than in

1980), particularly by a 25 percent reduction in unproductive time, and by improvements in the drilling technologies. Improvement of the drilling fluids (1) is being specially emphasized, as well as the programs to rationalize the work in that field. Among the measures adopted to improve drilling operations as a whole, efforts are concentrated on shortening the time of dismantling, transporting and assembling the drilling installations from one location to another by overlapping the stages of that cycle, on constructing roads to isolated wells with difficult working conditions in order to provide for regular access and preparation of the working front, and on strengthening the discipline and responsibility of technical-operational and administrative personnel for control and technical aid at wells.

Results of Analysis of Unproductive Time

Considered in detail, drilling operations in the first half of 1981 (2) also showed a number of failings. Only about 82 percent of the available working time was spent on drilling properly speaking and related operations, and the remainder of about 18 percent was spent on repairs (2.8 percent), complications (4.2 percent), technical accidents (6.3 percent) and unscheduled stoppages caused particularly by technical-material shortcomings. A 50 percent reduction in unproductive time would have actually meant about 80,000 meters of above-plan drilling with the same installations at the higher drilling rate.

Analysis of the reasons for spending this time outside the strictly productive process reveals a number of defects in the manufacture and use of the drilling installations, in the quality of some of the repairs, etc. Specification of the factors contributing to the stoppages indicates that the main one is unsatisfactory technicalmaterial supply, or rather the difficulties caused by the supplier units that are involved in crude oil and gas extraction by economic contracts for delivery and cooperation. Examination of the structure of the stoppages in all drilling and especially in depth drilling shows that a large proportion (over 50 percent) of them are due to lack of particular materials (pipes 6.1 percent, drill pipes 5 percent, chemicals for drilling fluids 11.5 percent, diesel oil 13.4 percent, electric power 3.8 percent, drill bits and spare parts 8.6 percent, etc.). For example late delivery of 3,700 tons of drill pipes of alloy steel (N 80, P 110 with API and special threads) greatly contributed to the delay in digging wells of great depth and suspension of the start of drilling operations in others, to say nothing of cases where the characteristics of some of the supplied materials (especially piping) are below the requested standard. Under such circumstances complications and technical accidents cause a large proportion (10.5 percent) of the unproductive time.

Failure of domestic producers to supply materials and spare parts leads to interruption or at least delay of the technological process of drilling (and extraction) and ultimately to excessive inputs of diesel oil and oil in the respective installations, which products are partially imported. Furthermore late delivery and failure to deliver the necessary standard varieties (contracted for and entered in schedules) means not only a drop in the drilling rate but also operations of inferior quality with all their bad effects upon other factors, which cause failures in their turn (for example instability of personnel and a resulting shortage of highly skilled manpower in the drilling sector, accounting for about 10 percent of the time of stoppages).

There were also lags in geologic drilling (about 17 percent) and depth drilling (6 percent) in the first half year, largely because of suppliers' late delivery of such

vital materials as heavy rolled drive pipes (Roman Pipes Enterprise) or forged and heat-treated ones (Bucherest Heavy Machinery Enterprise) despite firm contractual obligations.

Among other things, the supply of motors for drilling sets (motors delivered primarily by the Bucharest 23 August Enterprise) is highly important. Not to go back of 1980-1981, the permanent arrears in delivery of those products were never less than 50 pieces (As of 1 July 1981, 63 out of 105 800-horsepower heat engines had not been delivered, interfering with activation of 14 F-125, F-200 and F-320 heavy-type drilling installations and seven motor pump sets). In the case of spare parts, which should be delivered by the same enterprise, the arrears amount to about 33 percent of the obligations. Consequently the quality of the repairs on the heat engines driving the drilling installations that are performed at worksites or in the plants belonging to the petroleum sector is not always satisfactory, and it must be added that 283 800-horsepower engines and 165 h00-horsepower ones (fixed assets worth about 350 million lei) were immobilised at the start of the second half of 1981. As we said, lack of them at worksites leads to stoppages in drilling wells, performance of operations with lower engine power and drilling rates, and consequently to nonfulfillment of the provisions. This largely explains thy an unsatisfactory average drilling rate, far below the indices in other countries, was reached in the first half of this year.

But all the specialised unite have possibilities of raising their drilling rates. One of the most important and long awaited ones is the assimilation (still under way at the Ploiesti 1 May Enterprise) of the new drill bits with sliding bearings that would provide performances 3-4 times better than the bits in current production. Moreover the requirement for the bits now in use is still about 15,600 pieces short of coverage, and the supplier was 10 percent in arrears of the obligations due in the first half year and 40 percent in arrears in the case of control heads for wells.

Progress in Drilling Operations (in \$)

Activity	Plan fulfillment	for:

	6 months of 1981	8 months of 1981
Total drilling, including:	102.5	101.24
- Geologie	82.9	84.3
- Exploitation, including:	118.5	115.6
To increase final recovery factor	683.1	-
- Depth, including:	94.1	98.8
For exploitation	132.0	133.7

*In July and August progress was up 22.7 percent from the monthly average of the first half of 1981.

It is accordingly clear that as in the past years, despite the repeated assurances and provises of some ministries, industrial centrals and producers, the petroleum units are faced with a number of difficulties due to violation of the contractual obligations assumed by some enterprises in the metallurgical, machine building and chemical industries. Elimination of the difficulties, some of which were mentioned above, could make it possible to do more drilling and extract more crude oil more efficiently as it were.

Dispersal of operations over an extensive area, sometimes very difficult of access and varied in geologic structure, poses many problems for some trusts (Moinesti, for example, and the fulfillment and overfulfillment of the assumed tasks in this important sector of energy resources depend upon their rapid and efficient solution. It is very important here to adjust the current organisational forms to the particular existing conditions in each trust, which conditions are determined by the continuing expansion of investigations and drilling, especially at great depths.

This effort has many advantages, among which the following are noteworthy: uniform and comprehensive supervision and management (especially in case of emergencies at the drilling and extraction installations), improvement of the use index of the equipment and installations in operation, greater competence, skill and responsibility of the heads of sections and shops and those of the respective operational units, all of these being favorably affected by the organisational proximity to the work places (points). We consider the advantage equally important that is to be obtained by reducing the time and distance of travel, the input of fuels and, to a great extent, the indiscipline still to be seen at some of the more remote work places.

Besides shortening the time of remedial action in case of breakdowns and the time of stoppages, it would also be possible, and necessary, for the repair units of the Ministry of Petroleum and the trusts to be provided with and to more thoroughly and promptly assimilate the techniques and technologies leading to more efficient reconditioning and reuse of recoverable parts and subassemblies. It is also the obligation of the trusts and the drilling fields to make every effort, from recruitment, qualification, multiple qualification and retraining of workers and specialists to observance of discipline in general and of technological discipline in particular in order to minimize the category of unproductive "other time," which accounts for 30 percent of the structure of the stoppages and which, unfortunately, are not specified or analyzed in greater detail at the drilling fields so that the causes of these bad effects upon the drilling rate can be more precisely determined and eliminated.

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AGRICULTURAL RESEARCH PROGRAM FOR 1981-85 DISCUSSED

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[Article by Prof Nicolae Giosan, chairman of the Academy of Agricultural and Silvicultural Sciences]

[Text] The work meeting with workers in agricultural research and education, the food industry, forestry and water management, held on 9-10 September 1981 at the seat of the CC of the RCP, is part of the procedure of our party and state leadership for periodically examining with the responsible parties the activity of the various economic sectors. The holding of this meeting again points out the attention which our party and state leadership, Nicolae Ceausescu personally, pay to agriculture, the consistent effort to mobilize working people in this basic branch in formulating and implementing the measures to carry out the decisions of the 12th RCP Congress.

The deliberations — which pointed out the accomplishments and also the shortcomings in the area of scientific research designed to ensure the progress of agriculture — outlined the guidelines to upgrade the management of research, the introduction and use on an overall scale of the results of scientific discovery in the entire agricultural sector.

Highlighting the successes of research and its input into the development of agriculture and in the obtaining of the highest possible plant and animal output, the participants dwellt on the existence of a potential that has not been fully utilized. Hence, proposals and suggestions and specific measures were formulated, designed to provide a new quality to all the activity, commensurate with the needs of the new agricultural revolution, with the role assigned to this branch in ensuring ever better supplies to the population and raw materials needed by industry, in increasing the exportable surplus.

Recent years have seen important results obtained in agricultural surveying. Research workers have evolved and qualified new strains and hybrids of plants and nursery stock with superior biological features, have developed new techniques for boosting production and cutting costs for the main crops, in irrigated and nonirrigated systems, qualified and introduced in production some machines and installations for the mechanization of works in plant growing and animal raising, formulated more effective measures to prevent and control diseases and pests; in animal husbandry they evolved new animal lines and hybrids and developed new raising and utilization

techniques. Important results also were obtained in research in the areas of food industry and chemistry, utilization of vegetables and fruit, agricultural economy, water management, forestry, and so forth.

Nevertheless there still are major problems which require profound investigation and surveying. For instance, some strains that were evolved are not sufficiently adapted to the natural climate and soil conditions in various farming zones; they do not fully meet the new technical and material conditions of agriculture at this stage; they are not adequately resistant to diseases and pests; they are not resistant enough to dropping and shedding, to ensure harvesting without loss; they are not early enough, to reach complete maturity in the cool years.

In the system of the production and utilization of seeds and nursery stockit is necessary to renew the biological stock in every mandatory period, so that seeds from advanced propagation, sometimes degenerated and impurified, will not be used for production.

The results obtained in agriculture are directly tied to the land — the chief means of production in this significant branch of material production. Hence, studies in this field focus on the inventory and more profound estimation of all land resources, the formulation of procedures for land improvement and differential farming, for the purpose of good use of the natural climate and soil conditions and of our reserves.

The surveys in animal husbandry, specifically in the area of improvement of native breeds, reproduction, prevention and combating of sterility and morbidity in animals are not developed enough. Research needs to provide answers in terms of effective methods for animal breeding and foddering, in industrial systems and especially under the conditions that are specific to utilisation of resources on natural meadows and grassland.

The volume of research devoted to formulating the system of machinery for the mechanization of works on sloping lands, on heavy and sandy soils, of operations in animal husbandry and of some labor-consuming harvesting operations which some crops require has not yet reached the appropriate level.

Some shortcomings are still found in the area of using modern investigative methods that should permit the obtaining of the results of research in the shortest possible time and ensure promptest and best possible use in production. The revolution which occurs in biology, specifically in genetics, physiology and biochemistry, must be utilized in the work to develop new strains of plants and breeds of animals, on a par with the best results obtained in advanced countries. Agricultural research must be instrumental in boosting production on a countrywide scale, commensurately with the continuously expanding technical-material base.

Efficient Research Programs

The program for expansion of the activity of research and introduction of technical progress in agriculture, the food industry, forestry and water management of the Academy of Agricultural and Silvicultural Sciences was worked out on the basis of the guidelines outlined under the Directives of the 12th Congress of the Romanian Communist Party on Romania's socioeconomic development under the 1981-1985 Five-Year

Plan and the long-range outlines by 1990. The entire research work focuses on materializing the goal set by the Congress — realization of a profound agricultural revolution, rapid expansion and modernization of agricultural production.

The program was worked out under close cooperation with the National Council for Science and Technology and the Ministry of Agriculture and the Food Industry, with the participation of research institutes and stations, of institutes for agricultural education, and of experts from county agricultural bodies and production units.

Research focuses on formulating approaches to ensuring fullest possible utilization of natural climate and soil conditions, of material and financial assettand of the work force, greater economic efficiency of all the activity in agriculture, the food industry, water management and forestry.

The development and expansion of biological research, specifically in genetics and physiology, are aimed at evolving strains and hybrids with a high production potential, superior quality, broad ecological adaptability, resistance to diseases and pests, and capable of making best use of natural resources.

Moreover, there will be ampler research in terms of raising the production capacity of the land, profound estimation, in dynamics, of the varieties' potential of natural and economic fertility, the pedological substantization of hydromelioration projects, the good use of irrigated lands, of lands with excessive moisture or those that are subject to erosion, of acid, sandy or salty prounds, the increase in soil fertility by full use of organic fertilizers, of additions and of a diversified range of mineral fertilizers, with a high amount of active substance, in optimal economic doses.

The upgrading will continue in terms of technologies for the various crops and pedoclimatic zones, to ensure the production units' attaining the quantitative, qualitative and economic parameters obtained in research centers and foremost units, by determining the zonal agricultural systems, zoning of strains and hybrids, of crop pattern and rotation, by achieving optimal density and performing planting and the other farm works on schedule and at a qualitative level.

In animal husbandry, the objectives set center on improving animal breeds and upgrading the farming techniques, for the purpose of obtaining high outputs, improving the quality of products and yields in industrial processing, cutting the relative consumption rates for feed and the costs per unit of product.

Special emphasis will be placed on research projects in the field of biology of reproduction, prevention and control of sterility and upgrading of artificial insemination methods, improvement of birth rates and greater prolificity. New methods will be specified in the areas of prophylaxis, diagnostic and treatment of diseases, by application of new biological, biochemical and genetic procedures.

In the area of feed the focus will be on: boosting output for fodder crops and specifically increasing the productivity of meadows and grassland, finding and using new fodder resources, raising the contents of protein and energy, utilizing new methods for industrial treatment and processing of fodder for superior utilization. Moreover, special emphasis will be placed on diversifying the range of veterinary

and zootechnical products and upgrading the quality and biological and economic effectiveness of these products.

The material base of research has considerably expanded in recent years. Romania now has 26 research institutes, 120 research stations, centers and collectives in production units, correspondingly distributed on all the country's territory, to which are added the higher education institutes integrated into the research activity coordinated by the Academy of Agricultural and Silvicultural Sciences.

All the units under the above-mentioned academy are conducting a combined research and production activity and this is of special importance for research and for the introduction of technical progress by provision of seed, nursery stock and breeding stock, approval of the technologies required for the modernization of agricultural production.

The research and education units have an agricultural area of more than 170,000 ha, including more than 140,000 ha of arable land, vineyards and orchards, and silvicultural research units have about 100,000 ha of forests in experimental silvicultural centers.

The research network counts more than 13,000 workers, including over 4,000 with college degrees, to whom are added more than 1,000 teachers in higher education facilities.

As indicated by Nicolae Ceausescu at the recent Conference on problems of agricultural research held at the CC of the RCP, "needed now is good use of our forces and resources in research so that it may in the next years adequately meet the needs with which it is confronted."

Consequently, all research work is conducted on the basis of comprehensive programs, in broad collectives, with the participation of all institutes and specialists, including teaching personnel, in compliance with the requirements of scientific investigation.

Measures to Increase Output

Recently, better strains and hybrids for grain, industrial crops and fodder crops have been evolved and corresponding technologies have been specified and this permits the better ustilization of the biological potential and of the natural and economic conditions. For instance, new wheat strains have a production potential of 7.5-8.5 tons/ha, with 13-14.5% protein. Likewise, for corn, hybrids were obtained with a production capacity of 7 t/ha for early ones and 14 t/ha for late ones. The newly approved sunflower hybrids have a production potential of 4-4.5 t/ha, with a content of 50-52% oil in the seed.

Under this five-year plan, efforts in research are focused on developing new strains and hybrids with a great production potential for all crops. The strains and hybrids must have such features as great absorption capacity in terms of mineral substances, natural resistance to diseases and pests for the purpose of safety and stability of the harvest and great adaptability to the diversity of pedoclimatic conditions in this country.

The aim is to develop early strains in order to ensure full maturing of the output and to phase out the technological operations, including harvesting.

Great emphasis is placed on the issue of increasing the level of useful substances: oil, sugar, starch, fibers and others and specifically vegetable protein. The studies are aimed not only at increasing the protein level but also at enriching the vegetable proteins with essential amino acids (lysin, tryptophan), so that these may have a utilization rate and nutritional value close to those of animal proteins.

Under the special program of genetic engineering research will permit the obtaining in the fut—a of very high per hectare outputs: 20-25 tons of corn, 10-12 tons of wheat, 6-8 tons of sunflower, and so forth. This primarily involves creating some kinds of plants that differ from current ones — with rich and deep radicular systems, short-sized (to permit high density), vertical leaves, of a dark shade, with a greatly increased photosynthetic power, with richer fruition — and also new growing techniques, based on greater chemicalization and mechanization, and on irrigation.

In vegetable growing, the research programs are aimed at evolving strains with a great production potential, which are resistant to diseases and pests, which mature earlier, are radaptable to the various pedoclimatic conditions, and are richer in dry substance, salts and vitamins. Moreover, research will also involve new growing procedures, with special emphasis on mechanization — including harvesting, packaging, transportation — and on fertilization and irrigation of crops.

In fruit-tree growing studies will be stepped up to develop techniques for growing fruit trees on slopes, on lands specifically improved for planting. The stress is on modernizing the orchards in existence and also on establishing and operating intensive and superintensive orchards on these grounds. The focus is on obtaining varieties which are more productive, resistant to diseases and pests, have a high nutritional content, properties for long storage and are fit for mechanized picking.

Research in grape growing centers on developing highly productive varieties which are resistant to diseases and pests and to inclement weather. The optimalization of growing techniques, the upgrading of the approaches in terms of structuring and development of the ground, of establishing and operating the vineyards will result in a significantly lower consumption rate in terms of labor.

In animal husbandry, research needs to focus on utilization of modern methods for evolving new lines, types, and hybrids of animals, that provide higher and effective outputs in the context of intensive farming. Furthermore, it is necessary to upgrade the techniques of artificial insemination and zygote transplanting, for the purpose of improving the birth rate, increasing prolificity and more intensively using for breeding the animals with a high genetic potential.

Animal feed is the topic of a distinct chapter in zootechnological research. The main goal is to broaden the range and increase the production of protein feed, upgrade the harvesting procedures and technologies, the methods for storing and preparing the fodder for the purpose of maximum preservation of the nutritional value and especially of protein, increasing the nutritional value of the feed, specifically of by-products.

The results obtained in terms of boosting the productivity of natural pastureland still are modest. The research programs worked out are aimed at developing varieties of gramineae and leguminosae that are perennial and are capable of producing seeds for the periodical regeneration and powerseeding of all the grazing area. Moreover, modern techniques will be formulated which will ensure the obtaining of high and cost-effective fodder outputs.

Similar steps have also been outlined for the other areas of activity: the food industry, forestry and water management.

In close cooperation with the National Council for Science and Technology and the Hinistry of Education and Instruction, special research programs were worked out. They involve new sources of proteins, the increase in the production of biomass and its utilization for energy-producing purposes, and the use of nonconventional energy sources in agriculture.

Upgrading the management of the activity of research and introduction of technical progress is a central issue.

Better Use of Research

Provision of agriculture with quality seeds and nursery stock from most valuable strains is an outstanding task whose completion directly impacts production and actually is a materialization and a form of better utilization of research.

Because for some species of grain, industrial crops, textile plants, vegetables and fodder crops, not all the required amount of biological stock for the production units is ensured on a year-by-year basis, there is the need for improving the methods for producing the seeds and nursery stock, so that agriculture may be provided with the necessary amount of high-quality biological products.

For the purpose of enhancing the spirit of responsibility of research and higher education units, of experts in production in terms of prompt and complete introduction of technical progress in practical activity, a set of measures was outlined which will ensure a close cooperation among research units and production units. This unified system mainly incorporates the following projects: annual specification of strains and hybrids for each species, differentiated according to the various farming zones; production - in research institutes and stations and agricultural higher education institutes -- of the seeds and nursery stock, at the level required to meet countrywide needs; determination of techniques for each individual crop. differentiated according to strains and hybrids, based on the results obtained in research and by foremost units; specification of the methods for rational farming of irrigated lands, of lands with excessive moisture or eroded lands, of acid soils, sandy and salty soils. In animal husbandry, steps will be taken to ensure: production of breeding stock, breeders; improvement of animal breeds and soning according to the various pedoclimatic regions; improvement of the structure of the fodder base in compliance with the zones for raising animals and the size of hards; zonally differentiated outlining of the techniques for overall upgrading of pastureland and meadows by reseeding and overseeding, fertilization, natural grazing, harvesting and storage of output; continuous upgrading of farm production zoning at the level of unified agroindustrial councils and component units.

The research institutes and stations will be inextricably integrated into the activity of unified agroindustrial councils, helping to raise the production levels and the level of all their economic activity, concurrently with enhancing responsibility for the zones of impact and for the whole of agriculture.

In the context of utilizing our most expert forces in research and education, we need to move to materializing themsults of research in the unified agroindustrial councils, in production units, on farms, and fields. With the help of experts in the production field, based on the experience gained, applied will be the most appropriate methods and measures for crop growing and animal raising, that will result in the significant rise in production and increase in the economic efficiency of all the activity in agriculture.

11710 CSO: 2700

PROBLEM AREAS IN INCREASING PODDER PRODUCTION

Bucharest REVISTA ECONOMICA in Romanian No 37, 11 Sep 81 pp 8-9

Article by Dr Eng Alexandru Ignat: "Procurement of Podder Resources Essential to Growth of Zootechnical Production"

[Text] Micolas Cosusescu said, "The scotechnical programs we have undertaken require us to make every effort to secure the folder base qualitatively and quantitatively."

We know that as a basic component of any soctechnology, satisfactory procurement of fodder resources is a controlling factor for high livestock yields, especially under the conditions in Rosania, where the size of the new agrarian revolution are an important goal. In connection with the tasks of increasing the numbers of livestock and the soctechnical outputs (as generally reflected by the increase in the share of soctechnology in the total agricultural output to 15-16 percent by 1985), proper procurement of the fodder resources requires extensive technical and organizational messures as well as extensive economic measures for the rapid improvement of fodder procurement both quantitatively and qualitatively.

Development and application of technologies to improve the natural pastures and hapfields, improvement of the structure of the fodder resources as a whole, and harvesting, transportation and preservation of the output in sufficient quantities in accordance with the requirements of the numbers and entegories of animals in every area and productive unit are forement among the general problems of developing scotechnical activity, alongside increasing the numbers of livestock and poultry and developing new methods for improving the respective breads and new breading technologies permitting high yields of good quality.

The proportions of the various entegories of fedders in the present fedder base as a whole appear rational, namely 20-30 percent green fedder, 15-16 percent entillage fedder, 15-15 percent hays, 30 percent concentrated fedders (100 percent for hogs and poultry, 25 percent for cattle, and 10-15 percent for sheep), and coarse fedders 11-13 percent. But the respective fedder requirement must be secured quantitatively and qualitatively on every stock-raising unit in a structure adapted to each unit's particular needs and with rational and efficient exploitation of the many sources of fedders of vegetal origin, such as natural pastures, fedder crops on their own fields, grain and leguminous grain crops (which produce concentrated and coarse fedders), second crops in stubble, grass from forest pastures, other by-products from

the food industry, truck gardening and scotechnology suitable for use in foddering livestock, etc. Actually the sources of the fodders needed for higher livestock yields are very abundant. Determining the best ways and means of producing the quantities of fodders the livestock require and especially obtaining the expected results are the essentials. What are these ways and what is to be done for the purpose? Of course in these times, to be specific, it is essential to collect and prepare the fodders so that each particular unit is provided with the necessary fodder resources in full accord with the planned numbers of livestock and livestock yields. We shall also discuss below some more general and basic problems of the sector.

Better Use of Matural Pastures and Hayfields

Increased production of green mass and hay on the natural pastures and hayfields is, under Romanian conditions, a basic problem for the present and future of scotechnology and a requirement expressly stated by Party Secretary General Ricolas Commescu at the recent Working Conference on Agricultural Problems. As we know Romania has hold made and the state of natural pastures and hayfields. Unfortunately they yield only a partial return compared with their productive potential. Rearly every county has had good results in the form of increases by 3-4 times in the productivity of the pastures and hayfields. Over 20,000 kg of green mass per hectare have been obtained by fertilizing and performing the necessary operations on the pastures of Valend, Bran and Codlea in Brasov County, on those of Sura Mica, Paltinis and Crint in Sibiu County, and on those of Leresti, Rucar and Cateasca in Argue County. Therefore the county agricultural organs, all of whom hold pastures and hayfields, must take firm action to generalize those results as soon as possible and thereby double the yields of the pastures and hayfields and make new contributions to procurement of the fodder base.

In particular, the h.h million hectares (amounting to 30 percent of Romania's agricultural land) are distributed geographically as follows: \$35,500 hectares in the plains area, 2,3%,100 hectares in the hill area, and 1,189,800 hectares in the mountain area. Accordingly over 80 percent of the natural pastures are in the hill and mountain areas, namely in areas with very favorable committees for stock raising and extensive reserves for increased fodder production and consequently for increasing the numbers of livestock and the scotechnical outputs. As for ownership and administration of the natural pastures (processes indicative of the responsibilities for them), they are distributed as follows according to sectors: 1.5 million hectares belong to the people's councils, 1.7 million hectares to CAP's [Agricultural Cooperatives], 386,000 hectares to IAS's [State Agricultural Enterprises] and other state units, and \$33,000 hectares to private farms. Their distribution according to use is as follows: 291,000 hectares are used by IAS's, 130,000 hectares by other state units, 1.8h million hectares by CAP's, 717,000 hectares by occupantive members, and 1,8h1,000 hectares by private farms.

In the sense of Law No 8 of 1971 on Organisation, Administration and Use of Pastures, each sector is responsible for all improvement operations and rational use of the pastures belonging to it. Procurement of the material and financial resources out of state funds as well as internal incomes made it possible to implement a number of improvement projects over large areas. For example fertilizing operations were performed in 1980 over an area of more than 1.6 million hectares, 100,000 hectares were cleared of brush, antierosion projects were implemented on 50,000 hectares, mintenance work (clearing, leveling etc.) was done on 3 million hectares, and about 500,000 hectares (cumulative areas) of deteriorated pastures were soun. It is noteworthy

that yields of 12-16 tons of green mass per hectare were obtained from the pastures improved by surface operations (clearing, leveling and antierosion projects) and fertilizing and 20-30 tons per hectare from the resourn pastures, compared with only 4-5 tons from the unimproved pastures.

In order to expand the sown pastures to replace the deteriorated ones according to Micolae Ceausescu's directives, steps were taken to organise specialised seed plots in the pasture improvement and exploitation enterprises and IAS's, so that 3,983,000 hectares out of the total area of 4,419,300 hectares will be improved in 1981-1985 by agricultural improvement projects, including 630,400 hectares by soming and 3,358,900 by oversoning and fertilizing. The remaining 430,000 hectares is the area that requires a series of special measures. On the basis of the combined operations that are planned, the average yield should be increased from 12 tons of green may per hectare in 1980 to 20 tons per hectare in 1985, raising the natural pastures' contribution to the supply of valuable fedders from 30 percent in 1980 to about 15 percent in 1985 and providing a sure basis for increasing the livestock outputs and numbers. Some of the most important measures that will support the above-mentioned afforts are the special programs drafted on the level of every county, commune and unit and their complete application and daily enforcement of the technical-economic and organisational measures (making use of all local possibilities for fertilising all areas, expanding the highly productive species and varieties that are qualitatively superior and adapted to the local conditions, and irrigating the largest possible areas by use of local sources, including water from the unter table, in addition to waters from the big systems). Regular grasing on plote is also to be generalised, with restoration of the vegetation in several cycles and observance of the norms for the extent and duration of grazing on the same plot, the surplus green mass from the first cycle to be preserved as semisilage or vitamine hay.

In this connection experience tells us that organisation in every county of mechanization units suitably equipped for pasture improvement operations and coordinated by the appropriate county enterprises and an intensive effort on the part of those units are essential considerations for reaching the proposed parameters. And in this action of national importance the scientific researchers in the subject units of the Academy of Agricultural and Forestry Sciences and the specialised university departments are to concentrate their efforts more on development of effective varieties of grasses and legumes and supply of the seed requirement for regenerating and oversowing more than 1 million hectares of natural pastures a year. Studies of the technologies for exploiting the pastures are to be expanded in order to meet all the requirements for maximum yields of milk, meet, wool and other livestock products.

Greater Quality Fields from Fodder Grope on Their Com Plots

after the main producers of volume fodders, namely the natural pastures, the crops on their own plots (occupying over 850,000 hectares this year and to occupy over 950,000 hectares in 1985) are also a major source of fodders and one that supplies almost the entire requirement for green mass and hay in some areas. The basic problems arising now and in the future concerning these crops are in connection with expansion of the species and varieties with high productive potentials, including alfalfa, fodder beets, assed ryegrass, winter vetch, rape, fodder cabbage etc. In connection with lack of energy, it is mecessary to increase the proportion of mixtures of legumes and perennial grasses, which provide high yields of green mass per unit of area even with moderate mitrogen fertilizing, and a fodder is obtained with a balanced content of protein and energy-bearing substances. It is also planned to

expand the system with two answal fodder crops, preferably on irrigated lands, using crops producing maximum yields like award ryegrass sown at the end of August, moved twice and then followed by silage corn, winter barley flaked or ensilaged and followed by silage corn, or winter vetch (wheat-pea) followed by silage corn, Sudan grass or sorghum, etc.

Yields per hectere of the main perennial green mass crops are planned to be increased from 20 tons in 1961 to 40 tons in 1965, those of tubers from 42 tons to 55 tons, those of award ryegrass followed by silage own from 52 tons to 70 tons, etc. As indicated by experience and the studies, the main problems arising in connection with increasing and improving the fodders in this group are those of supply of seeds of high biologic value superior to those now used in production and expansion of invigation, chemisation and mechanisation of operations for sowing, maintaining and harvesting the yields of green mass fodders and hay while generalizing modern methods of harvesting, preserving and preparing the volume fodders. These are questions that particularly research personnel and all personnel engaged in the effort to secure the fodder base in keeping with the revolutionary aims of Romanian sootechnology.

Nore Double Grope and By-Product Fodders in the Fodder Supply

By expanding simultaneously sown double crops with effective plants and under irrigation as far as possible, while applying a switable technology, high yields per hectare can be obtained that will meet the green mass fodder requirements of the livestock in certain periods or will provide additional quantities for preservation in the form of hay or ensilaged fodder. Annual sowing of 1 million hectares in double crops of fodder plants can be a certain source of fodder, provided that every specialist sees to it that the particular technologies for those crops are most scrupulously observed. The results obtained by many units guarantee that the yields of 10 tons of green mass per hectare planned for 1981 and those of 18 tons per hectare planned for 1985 can be attained and surpassed. The assortment of successive summer crops (especially after barley and wheat) may be diversified by introducing, in addition to corn, fodder rape and cabbage for late grazing.

The by-product fodders from industry, agriculture and sostechnology are in their turn highly important sources for quantitative and qualitative development of livestock feed. The content in feed units of the so-called by-products for foddering livestock (products resulting from bread grains and technical crops, from the feed industry, and from recycling droppings of poultry, eattle, hegs and sheep) is planned to represent about 20 percent of the necessary total of the fodder supply. Therefore enhancing the nutritive value of the by-product fodders (before they are introduced into cattle and sheep feed) must be a constant concern of the scotechnical specialists. But naturally application of modern methods of preparing coarse fodders requires installation of kitchens equipped with proper installations for preparing quality fodders on all cattle and sheep farms.

In the case of the cultivated concentrated fodders and especially corn and barley, which occupy areas of more than 3.5 million bectares and about 800,000 bectares respectively and which make up 100 percent of the feed of hogs and poultry, 10-15 percent of the feed of sheep, and 20-25 percent of the cattle feed, the most modern methods must be used in order to keep raising the yields per unit of area. Here exphasis must be placed on cultivation of the cirn hybrids rich in proteins and essential axino acids. One major problem is to secure a constant proportion between barley and corn fodders throughout the year by an ideal combination of the qualities of

these two great components and supplementing them with protein meal and industrial fodders. It is necessary to obtain a fodder that is as complete as possible and will meet the mutritional requirements of all species and categories of livestock in order to increase the output with the lowest possible specific consumption.

The planned fodder yields will enhance the results in scotechnology. They are entirely feasible and can even be considerably exceeded in some areas. But there is no question that this requires complete implementation of the programs of technical-economic and organisational measures for maximum use of the many possibilities in every county and every productive unit for procurement of fodder reserves in surplus quantities and of superior quality. To this end special emphasis is to be placed in this period or harvesting and preparing the fodders. It is only in this way that all species and categories of livestock will be provided with abundant feed and the great tasks of zootechnology and agriculture in general to achieve the new agrarian revolution will be fulfilled and overfulfilled.

In implementing the whole series of programs and measures to obtain higher fodder yields all agricultural units must particularly emphasise reduction of material outlays on production, which are still in a relatively high proportion in agriculture (especially as regards the structure of production costs for the main fodder crops). The great restrictions imposed by the worldwide raw material and energy crisis require intelligence and the creative spirit of organisation to replace a large part of the production or material costs, which are still too high as compared with the reserves and potentials evidenced in the units where the good organisation, management, performance and completion of the activity have raised economic effectiveness to high parameters.

5186

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BANKER RIKANOVIC QUERIED ON OVERHEATED DENAND FOR CREDIT

Belgrade NEDELJNE INFORMATIVNE NOVINE in Serbo-Croatian No 1602, 13 Sep 81 pp 8-10

[Article by Mirko Cekic: "A Tower Built of Credit"]

[Text] The well-known firm INA (Zagreb Petroleum Industry) announced on Tuesday, following a decision of its Central Workers' Council, that in the coming days it would halt deliveries of its products to consumers in Bosnia-Hercegovina, Macedonia, Serbia and Vojvodina, and that it would also be sending smaller deliveries to customers in its own Croatia. Only the regions of Slovenia, Montenegro and Kosovo will be spared restrictions. And as is usually the case with us in such situations, the decision was immediately reported on the evening television broadcasts somehow in that tone reserved for quite dramatic events.

Indeed there is a certain amount of dramatic suspense as to how it will all end. The greatest virtue of this decision, when the dust settles, will perhaps be the aspect that the republics and provinces have been clearly put on notice that one business firm is refusing to grant them further credit. We have actually not had such cases up to now. Usually it was the reverse, the government issuing a threat to some work organization.

So, what has happened? Were we to forget that we are dealing with INA, we might reach this conclusion: business firms which are purchasing petroleum on the world market are buying it for dollars at world prices and by and large on credit. The six republics and two provinces are committed to reimbursing the business firms supplying them for that credit and other costs. Since each of them has its own difficulties with the balance of payments and a chronic shortage of foreign exchange, the simplest way to furnish domestic petroleum firms foreign exchange to pay off their credits is for the republics to take new credits. But since they themselves have committed themselves not to enter into further foreign indebtedness, they have found themselves in an unusual circle of complicated mutual credit relations—the tower built of credit has fallen. Or, as the electric power producers would put it: the system has failed. It will take some time for the flows of petroleum to get back into their old balance on what we refer to as our undivided economic region.

If the public applies its magnifying glass only to this expensive petroleum, the conclusion will be that the troubles are on the other side of the world, not on our side, which for such a long time has been accustomed to resolve all its troubles with credit. The Yugoslavs obtained credit amounting to \$150 million from the French a few days ago, the newspaper reports on the front page. The people in Belgrade can buy coal on credit. But not automobiles, the Federal Executive Council has banned extension of credit for the purchase of cars. The people in Novo Mesto have been resourceful and have decided to sell the little "Renault 4" on the "deferred payment" system (which used to be called credit) for the simple reason that in 8 months they have not managed to sell even 1,000 cars for cash. How is the factory to survive? And what is the largest producer, Zastava in Kragujevac, to do? Merely pile up the losses and cut back production? After all, who is going to pay for the "stojadin" [nickname for the Fiat 101, a pun meaning "100 troubles"—translator's note] exactly 17 monthly paychecks of the average Yugoslav worker (17 times 9,400 dinars).

Credit for Credit

One of the more piquant items in the newspaper these past few days was the one about the Belgrade man whom the bank paid out a sizable amount of faulty bank notes. Brand new ones. And immediately the quip circulated in the city: even the mint in Topcider has such a heavy work load that it is not mindful of the quality of its goods, and is even passing off rejects. Not many people know that the mint does in fact need credit for better equipment....

A straw vote would probably show that a majority of Yugoslavs on city streets would answer that question "yes," while those in rural areas would answer "you must be kidding." The figures show that this would be a hasty conclusion and that very close attention indeed is paid to the taking of credit. Though it does pay to "conduct one's business with credit," not many have as yet mastered that skill and freed themselves of the adage that debts make poor company. Last year the average four-member family used in Yugoslav statistics (blue collar-white collar) had at its disposition 13,720 dinars a month, of which credits and loans amounted to 1,580 dinars.

The larger the earnings, of course, the greater the social security, and credit is looked upon more readily as a supplemental stimulant of the standard of living. In families whose envelopes for expenditure contain 26,637 dinars on the average, 3,358 went for credit. Those whose average was 8,524 dinars, that is, in the category of lowest income, had monthly credits amounting to 730 dinars. Incidentally, in all the brackets—from 7,000 to more than 25,000 dinars a month—money was also regularly withdrawn from savings accounts.

According to the most recent bulletin of the National Bank--to be sure, the figures have been tabulated only for February--individuals had bank balances of 562 billion dinars (239 billion in foreign exchange), and they owed to the banks on the basis of credit 166 billion dinars (of this 157 billion represent long-term credit, mainly for housing).

Who, then, is making the most use of credit? ... The economy?

That is natural. Of the 1,500 billion dinars of credit and other lendings of the banks, basic organizations in the economy were using 1,479 billion dinars.

NIN spoke with Svetozar Rikanovic, chairman of the business board of the Bank of Belgrade, one of our largest banks, with highly ramified operations and a work force of 4,500, says:

"All economic entities in our society are looking for additional sources of funds. The tendency to contract indebtedness extends over the entire period in which we have had pronounced inflation. In my opinion this is an example which shows us that economic laws are operating in a powerful way even when we do not wish to notice them. It also means that all the vital participants in the economic process—from the individual and the work organization to the government—are behaving rationally within the context of the economic policy in effect during that period. This is an evident pattern.

Someone Else's Money: A Privilege for the Debtor

Is that rationality socially beneficial? Or isn't it?

"Let us look at two extremely important areas.

"In foreign economic relations we are having quite a few difficulties, and the demand for foreign exchange is strongly felt. Nevertheless, the question can be put: why isn't the economy exporting more? The answer is simple—because more can be earned by selling goods on the domestic market. There have to be economic interests which will make up that difference to the economy in view of the well-known fact that a major portion of it has lower labor productivity than the world level. This cannot be ignored, and there is not much benefit to be obtained from the frequent criticism of the economy for not being oriented toward exports.

"The second is the area of investments. Reduction of investments or narrowing of the investment front is one of the principal requirements of stabilization. In the long run stabilization is a goal which is very much in the interest of enterprises themselves. However, work organizations are seeking credits for investment projects and are undertaking new ones. Why? Because this kind of behavior is considered sensible in the context of this kind of inflation."

Rikanovic displayed a computation which the Bank of Belgrade had done for NIN.

If a work organisation takes out credit for 10 years at a 10-percent rate of interest, 2 years being allowed for use of the credit before repayment begins, at a rate of inflation of 40 percent that debtor will actually return to the bank only 39 percent of the credit it obtained. The value of the money has fallen so much in the meantime that that enterprise or that individual lucky enough to obtain credit is "rewarded" 61 percent of that amount just because it was using credit. Even if we assume that the rate of inflation over that 10-year period

will be 20 percent, this type of "social reward" would amount to 32 percent, since in real terms he would repay 68 of the 100 dinars obtained.

"It is quite clear that every intelligent economic entity will decide on investment projects at this time and will try to make the share of credit in that project as large as possible. A conflict arises between the interests of society and the interests of the individual work organization. If all participants in the economy pursued what is in the interest of society, perhaps that conflict would not occur. But that kind of behavior is not natural when the thinking in work organizations is done in economic terms. Organizations using credit acquire a certain privilege, and that accounts for the increasing number of those who are seeking that 'privilege.'... To be sure, there is no doubt that the campaign which society is now conducting, just as it has done on certain previous occasions, is yielding definite results. That will be the case so long as the campaign lasts. Nevertheless, a very detailed analysis should be made of what it is that constantly and irresistibly returns the economic decisionmaker to economic logic."

The way things have happened since adoption and enforcement of the Law on Associated Labor, the conclusion would be that the social commitment on the pooling of resources by several basic organizations to carry out a joint project has not managed to take precedence over the credit relationship.

Rikanovic confirms this. And he says: some people feel that the economy has become poor and has nothing to pool. Though there is truth in that, it is not altogether accurate. We have had cases in practice where the one who has money refuses to pool resources even in a project which facilitates his cycle of reproduction. And we have also encountered examples where someone without money refuses to receive it from another organization, but persistently seeks credit from the bank. Why? Everyone is trying to get out of repaying the real value of money obtained when there is a possibility of returning less and of taking advantage of inflation.

Credit as Against Pooling

For years economic policy has supported a development program of the economy based on credit. Thus in 1977, at a time when there was very strong insistence on the pooling of capital, the obligation that investors have their own capital for investment projects was discontinued. The so-called "investor" could undertake a project without a dinar of his own, which greatly stimulated the flood of investment demand which is still felt.

"We were uncertain as to how to overcome this unrealistic wave of investments. The legislators expected that several organizations would invest their own capital and in that way establish firmer relations in financial matters and in production. The majority, however, went to the bank instead of other partners. We have already said that for them this was more sensible and logical in economic terms; economic laws drive them in that direction. Thus the volume of our decisions on investment projects, which was about 4 billion dinars in 1976 and 6.2 billion in 1977, reached that amount in 6 months of 1978. At that time we

decided to require investors to put up their own capital in undertaking investment projects. I think it was that decision of ours to restrict investment credit, which was made on our own initiative, that helped the most in making us one of the most solvent banks in the country.

"At the moment when that decision was made the bank's average share in investment projects was 55 percent, and in certain cases it went even as high as 80 percent."

This type of conversation led us to the idea that not much had been done in transformation of the banks. Political assessments to that effect have incidentally been made from time to time. Are the banks "power centers" when they hold in their hands such a strong credit potential?

"The bank is, of course, a very large center of power, since in it the supply and demand of the capital of society take the form of modest supply and enormous demand. Whoever decides who is to be given that credit has tremendous power." However, Rikanovic says:

"We were aware of that. We found a solution whereby dualism of having the business board and specialized staff services on the one side and associated labor on the other was avoided. We made the transition to another system in which the decisions on the fate of any particular project are made by delegates through a give and take concerning the value of projects, based on the criteria which they themselves have adopted. The specialized staff services do not act as an arbiter, but as a professional service. This means that the economy is taking over that tremendous financial power of the banks."

Are the Banks Powerful

In answer to the question of whether there is interrepublic circulation of capital Rikanovic says that there is insofar as there is unity on the Yugoslav market. The bank cannot be the frontrunner, but acts as cover for the economy and serves the interests of associated labor whose money is in it. If its members decide to invest in other republics, then it will follow their lead. That is natural, since the social capital that is in the bank is the capital of associated labor.

However, when it comes to the money market, that is, short-term interbank loans, then this money moves rapidly between banks regardless of borders. This year, for instance, the Bank of Belgrade has loaned to other banks 300 million dinars a day. Mostly to banks in Serbia, about 15.3 billion dinars. But also to banks in other republics, predominantly in Croatia-5.2 billion dinars. Incidentally, it is in our economic interest, he says, to lend to others the surplus money which because of the ceiling on lendings we are unable to use ourselves.

Generally speaking: social capital has been regionalized to the same extent as regionalism has affected other sectors of the economy. If the social capital in a bank is a "potential amount of credit," and credit is a privilege in an inflationary situation, it is logical that that privilege be used first by those to

whom the bank belongs. This most recent example with petroleum shows what it means when one republic is indebted to an enterprise from another republic. INA, indeed just like any other enterprise, would very gladly take credits from someone else. But with this kind of inflation and the rising value of the dollar, it does not make economic sense at all for it to extend credit to others.

7045

CSO: 2800/16

ACRICULTURAL STATUS, DEVELOPMENT PLANS DISCUSSED

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 18 Sep 81 p 12

[Text] Milovan Zidar, president of the Federal Agricultural Committee stated that poor weather conditions brought late harvests last year which lad to spring work that had to be done during major flooding and dry periods in various places. For those reasons, harvest totals this year are reduced, and once more it has turned out that bad weather conditions have had a much greater impact on the traditional, natural production that is still done in a primitive way. Conversely, the blows and the losses were less where work is organized in a modern way, on the basis of available knowledge and resources for production.

For these reasons, the land planted to wheat was reduced in the fall of 1980 by 130,000 hectares in comparison with 1979. The total harvest reached only 4.5 million tons, or 13 percent less than in 1980. That was 1.5 million tons less than the planned quantity for 1985. Of that production, 2 million tons were gathered by the end of August, meaning hhen the seed grain is set aside, around half of the total crop. At the same time, broad activities were being carried out in Yugoslavia to urge more planting of spring crops in the spring. The campaign succeeded, with additional 117,000 hectares of corn, 25,000 hectares of sugar beets, and 15,000 hectares of sunflowers planted. There was also a significant advance in soy bean planting, with an additional 28,000 hectares planted.

After the drought and other unfavorable weather, the harvest of these crops is being awaited with considerable uncertainty. Estimates indicate that the corn harvest this year will be close to last year's level--9-9.5 million tons, while sugar beets will total about 6 million tons (from which 780,000 tons of sugar are expected to be produced); due to massive outbreaks of plant disease, the sunflower harvest is expected to fall considerably short of anticipations, with only some 200,000 tons. Besides that, about 65,000 tons of oil rape and 87,000 tons of soya are expected. Unfortunately, due to the sunflower shortfall there will not be enough edible oil on the market next year, so that it will be necessary to import the same amount as the previous year.

In the first half of this year, the level of livestock production had the same dynamics as during the same period of last year. Along with further changes in the structure of production, the share of poultry in the total increased at the expense of beef production. Yet despite the decline in beef production, surpluses of yearling beef appeared because of reduced exports. It is estimated that the surplus will reach 10,000 tons, with 20,000 yearling steers already received for slaughter.

In order to protect the livestock industry from meat surpluses and fattened cattle, purchases for reserves should be organized by republics and for the federation.

Also of significance for livestock production is that due to abnormally high corn prices, and shortages of protein feed, a trend has appeared toward the reduction of production of pork, poultry meat and eggs, which is manifested in high market offerings of young pigs at low prices, and in low weights for slaughtered chickens. At the moment, a special problem for further livestock production development is found in the lack of foreign exchange for importing protein feeds. Specifically, in the first 6 months about 45 percent of planned amounts of thes? were imported for 1981 needs, but import of the remaining amounts is uncertain because the necessary foreign exchange has not been provided.

Among the tasks awaiting to be fulfilled in agricultural production, there is the fall planting, which will be more complicated this year because of the situation with wheat. The aim is to reduce wheat imports to the lowest possible level. Therefore, the plans of the republics and provinces anticipate planting of 1,566,000 hectares to wheat during this fall's planting; that total would be 13 percent more than the land harvested this year, but it is still insufficient to satisfy domestic needs. Under the condition that a record average yield be achieved of 3.6 tons per hectare, total production would be 5.6 million tons. If as usual half of this yield were to be purchased, the needs for this grain would not be completely satisfied even next year.

Therefore, the Federal Executive Council has advised that the planned land total be reconsidered and that it be increased to at least 1,635,000 hectares, or 94,000 hectares more, for that is the essential minimum. When, however, the talk is of planting wheat, it is very important to provide foreign exchange funds for importing raw materials to produce mineral fertilizers, spare parts, and plant protection materials. Efforts are being made in the republics and provinces to provide the funds for these purposes, but at this time, for example, another 39 million dollars are needed just for fertilizers. Yet the lack of sufficient fertilizer will mean the failure to achieve the needed yield per surface unit, meaning in turn a continued stagnation in production. Provision of foreign exchange for the needs of agricultural production is right now being considered by the interest communities in the sense of acquiring necessary priorities in the balance of payments programs of the republics and provinces.

The struggle to purchase higher quanties of the total fall harvest, particularly of corn, is currently foremost. Price, of course, is only one of the elements that affect the quantity, and steps need to be taken in a package of activities and measures that will make it possible to avoid chance and autarchical market functioning outside the plan's directions and social agreements. The deficit for corn relative to needs in Yugoslavia amounts, incidentally, to about 700,000 tons.

Grains as Strategic Crops

Ivo Kustrak, president of the Section for Agriculture and the Village of the Federal SAWPY Conference referred mainly to technical and technological progress and to Yugoslavia's place in world agriculture in his remarks. He felt that special attention should be paid to primary production, including everything from wheat to

all manner of vegetables. Yet he declared that the strategic crops in plant production are obviously the grains. Where does Yugoslavia stand in that regard? Trends in Europe are generally on the upswing; for example, Western Europe has increased its cultivated crop production to such a degree that it has provided for its agricultural needs. That has been accomplished by an active agrarian policy, so that the productivity in these countries is also at a very high level.

If we are considering only grains, there are 4 groups on the basis of average yields per land unit. The first group consists of Great Britain and France. Great Britain has already reached an average yield of 4,400 kilograms, while France has an average of 4,300 kilograms per hectare for all grains. The second group includes the FRG, Austria and Hungary, with 4,200 kilograms per hectare. At the head of the third group are Denmark and Czechoslovakia, with 3,900 and 3,800 kilogram of grain per hectare respectively. Yugoslavia, the GDR and Bulgaria are also in this group at 3,500 kilograms of grain per hectare.

The question arises as to why Yugoslav production is less than certain neighboring countries, such as Hungary. In Hungary, however, they use fully 300 kolograms of active fertilizer materials per hectare, while in Yugoslavia that figure is only 100 kilograms. That means that for an additional 700 kilograms of production per hectare, they use 200 more kilograms of mineral fertilizer. Facilities for producing these substances in such quantities still do not exist in Yugoslavia. It is anticipated that something along those lines will be possible beginning in 1983.

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